

Uji Coba Instrumen Variabel x  
Minat Berwirausaha

| No.<br>Resp.                 | Butir Pernyataan |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      | ΣY <sub>i</sub> | ΣY <sub>i</sub> <sup>2</sup> |
|------------------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----------------|------------------------------|
|                              | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 29  | 30  | 31  |      |                 |                              |
| 1                            | 5                | 4   | 5   | 5   | 5   | 4   | 3   | 4   | 4   | 4   | 4   | 1   | 4   | 3   | 5   | 3   | 1   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 4   | 1   | 4   | 4   | 3   | 5   | 121  | 14641           |                              |
| 2                            | 4                | 5   | 3   | 4   | 4   | 4   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 4   | 3   | 3   | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 3   | 3   | 106  | 11236           |                              |
| 3                            | 5                | 4   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 4   | 5   | 4   | 4   | 3   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 3   | 4   | 3   | 3   | 127  | 16129           |                              |
| 4                            | 4                | 5   | 3   | 3   | 5   | 5   | 4   | 4   | 2   | 5   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 2   | 3   | 5   | 5   | 5   | 5   | 3   | 5   | 4   | 5   | 5   | 5   | 2   | 145  | 21025           |                              |
| 5                            | 5                | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 112  | 12544           |                              |
| 6                            | 3                | 4   | 3   | 4   | 4   | 5   | 4   | 3   | 2   | 5   | 5   | 4   | 4   | 3   | 5   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 4   | 3   | 4   | 120  | 14400           |                              |
| 7                            | 4                | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 3   | 4   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 5   | 4   | 2   | 4   | 132  | 17424           |                              |
| 8                            | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 3   | 5   | 5   | 5   | 5   | 4   | 5   | 4   | 3   | 4   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 3   | 5   | 5   | 4   | 4   | 114  | 12996           |                              |
| 9                            | 5                | 5   | 3   | 3   | 5   | 5   | 5   | 4   | 2   | 5   | 5   | 5   | 5   | 2   | 5   | 2   | 1   | 3   | 5   | 5   | 2   | 5   | 3   | 2   | 4   | 2   | 5   | 5   | 3   | 3   | 127  | 16129           |                              |
| 10                           | 4                | 3   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 3   | 5   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 3   | 4   | 126  | 15876           |                              |
| 11                           | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 2   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 2   | 5   | 5   | 2   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 107  | 11449           |                              |
| 12                           | 4                | 4   | 3   | 3   | 5   | 4   | 3   | 3   | 2   | 4   | 4   | 4   | 4   | 3   | 4   | 2   | 2   | 3   | 5   | 4   | 3   | 3   | 5   | 3   | 4   | 2   | 5   | 4   | 4   | 4   | 132  | 17424           |                              |
| 13                           | 4                | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 3   | 4   | 3   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 3   | 4   | 3   | 138  | 19044           |                              |
| 14                           | 5                | 5   | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 4   | 5   | 5   | 4   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 4   | 3   | 4   | 120  | 14400           |                              |
| 15                           | 4                | 5   | 3   | 4   | 4   | 5   | 4   | 4   | 2   | 5   | 5   | 4   | 5   | 3   | 5   | 3   | 4   | 3   | 4   | 5   | 4   | 5   | 4   | 3   | 4   | 3   | 4   | 4   | 4   | 4   | 111  | 12321           |                              |
| 16                           | 4                | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 3   | 3   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 3   | 3   | 138  | 19044           |                              |
| 17                           | 5                | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 3   | 116  | 13456           |                              |
| 18                           | 4                | 4   | 3   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 124  | 15376           |                              |
| 19                           | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 3   | 4   | 130  | 16900           |                              |
| 20                           | 4                | 4   | 4   | 4   | 4   | 5   | 3   | 4   | 4   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 114  | 12996           |                              |
| 21                           | 4                | 4   | 4   | 3   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 5   | 4   | 3   | 4   | 3   | 3   | 3   | 3   | 4   | 5   | 5   | 5   | 4   | 3   | 4   | 3   | 4   | 4   | 4   | 106  | 11236           |                              |
| 22                           | 4                | 3   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 5   | 4   | 4   | 4   | 3   | 4   | 3   | 2   | 4   | 5   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 4   | 3   | 3   | 111  | 12321           |                              |
| 23                           | 4                | 3   | 3   | 3   | 4   | 4   | 4   | 3   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 5   | 4   | 3   | 3   | 121  | 14641           |                              |
| 24                           | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 3   | 3   | 5   | 5   | 4   | 5   | 4   | 5   | 3   | 3   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 3   | 3   | 3   | 110  | 12100           |                              |
| 25                           | 4                | 4   | 4   | 4   | 5   | 4   | 5   | 5   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 3   | 4   | 3   | 3   | 3   | 4   | 1   | 2   | 2   | 108  | 11664           |                              |
| 26                           | 4                | 2   | 3   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 5   | 4   | 4   | 3   | 4   | 3   | 2   | 3   | 4   | 4   | 4   | 5   | 4   | 3   | 4   | 3   | 4   | 4   | 3   | 4   | 131  | 17161           |                              |
| 27                           | 5                | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 132  | 17424           |                              |
| 28                           | 4                | 4   | 3   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 3   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 108  | 11664           |                              |
| 29                           | 5                | 4   | 3   | 3   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 5   | 3   | 3   | 2   | 3   | 4   | 5   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 4   | 3   | 3   | 120  | 14400           |                              |
| 30                           | 4                | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 4   | 5   | 5   | 4   | 4   | 3   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 3   | 4   | 3   | 139  | 19321           |                              |
| 31                           | 5                | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 3   | 5   | 4   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 3   | 3757 | 459063          |                              |
| ΣY <sub>i</sub>              | 136              | 127 | 117 | 122 | 139 | 136 | 122 | 122 | 105 | 138 | 142 | 128 | 137 | 123 | 136 | 110 | 99  | 111 | 135 | 143 | 135 | 135 | 128 | 113 | 128 | 108 | 136 | 124 | 111 | 111 |      |                 |                              |
| ΣY <sub>i</sub> <sup>2</sup> | 606              | 535 | 459 | 494 | 631 | 608 | 498 | 500 | 387 | 624 | 658 | 546 | 613 | 513 | 608 | 406 | 349 | 413 | 599 | 667 | 609 | 599 | 542 | 433 | 536 | 398 | 612 | 516 | 419 | 417 |      |                 |                              |

## Lampiran 7

**Data Hasil Perhitungan Uji Validitas Skor Butir dengan Skor Total  
Variabel x (Minat Berwirausaha)**

| No. Butir | $\sum X_i$ | $\sum Y_i^2$ | $\sum Y_i \cdot Y_t$ | $\sum y_i^2$ | $\sum y_i \cdot y_t$ | $\sum y_t^2$ | $r_{hitung}$ | $r_{tabel}$ | Kesimp. |
|-----------|------------|--------------|----------------------|--------------|----------------------|--------------|--------------|-------------|---------|
| 1         | 138        | 622          | 20083                | 7.68         | 3358.29              | 3738.84      | 19.822       | 0.355       | Valid   |
| 2         | 127        | 535          | 18535                | 14.71        | 3143.42              | 3738.84      | 13.404       | 0.355       | Valid   |
| 3         | 117        | 459          | 17113                | 17.42        | 2933.35              | 3738.84      | 11.494       | 0.355       | Valid   |
| 4         | 122        | 494          | 17856                | 13.87        | 3070.39              | 3738.84      | 13.483       | 0.355       | Valid   |
| 5         | 139        | 631          | 20245                | 7.74         | 3399.10              | 3738.84      | 19.979       | 0.355       | Valid   |
| 6         | 136        | 608          | 19875                | 11.35        | 3392.68              | 3738.84      | 16.466       | 0.355       | Valid   |
| 7         | 122        | 498          | 17863                | 17.87        | 3077.39              | 3738.84      | 11.905       | 0.355       | Valid   |
| 8         | 122        | 500          | 17876                | 19.87        | 3090.39              | 3738.84      | 11.338       | 0.355       | Valid   |
| 9         | 105        | 387          | 15397                | 31.35        | 2671.68              | 3738.84      | 7.803        | 0.355       | Valid   |
| 10        | 140        | 640          | 20367                | 7.74         | 3399.90              | 3738.84      | 19.984       | 0.355       | Valid   |
| 11        | 142        | 658          | 20664                | 7.55         | 3454.52              | 3738.84      | 20.563       | 0.355       | Valid   |
| 12        | 101        | 349          | 10831                | 19.94        | -1409.55             | 3738.84      | -5.163       | 0.355       | Drop    |
| 13        | 137        | 613          | 19972                | 7.55         | 3368.48              | 3738.84      | 20.051       | 0.355       | Valid   |
| 14        | 123        | 513          | 18017                | 24.97        | 3110.19              | 3738.84      | 10.180       | 0.355       | Valid   |
| 15        | 138        | 624          | 20097                | 9.68         | 3372.29              | 3738.84      | 17.729       | 0.355       | Valid   |
| 16        | 110        | 406          | 16119                | 15.68        | 2787.71              | 3738.84      | 11.514       | 0.355       | Valid   |
| 17        | 99         | 349          | 14551                | 32.84        | 2552.84              | 3738.84      | 7.286        | 0.355       | Valid   |
| 18        | 97         | 321          | 14095                | 17.48        | 2339.23              | 3738.84      | 9.149        | 0.355       | Valid   |
| 19        | 145        | 685          | 21055                | 6.77         | 3481.94              | 3738.84      | 21.879       | 0.355       | Valid   |
| 20        | 143        | 667          | 20833                | 7.35         | 3502.32              | 3738.84      | 21.120       | 0.355       | Valid   |
| 21        | 135        | 609          | 19721                | 21.10        | 3359.87              | 3738.84      | 11.963       | 0.355       | Valid   |
| 22        | 135        | 599          | 19709                | 11.10        | 3347.87              | 3738.84      | 16.436       | 0.355       | Valid   |
| 23        | 128        | 542          | 18710                | 13.48        | 3197.23              | 3738.84      | 14.240       | 0.355       | Valid   |
| 24        | 113        | 433          | 16606                | 21.10        | 2911.13              | 3738.84      | 10.365       | 0.355       | Valid   |
| 25        | 128        | 536          | 18684                | 7.48         | 3171.23              | 3738.84      | 18.958       | 0.355       | Valid   |
| 26        | 108        | 398          | 15850                | 21.74        | 2761.10              | 3738.84      | 9.684        | 0.355       | Valid   |
| 27        | 137        | 619          | 19955                | 13.55        | 3351.48              | 3738.84      | 14.891       | 0.355       | Valid   |
| 28        | 135        | 601          | 19655                | 13.10        | 3293.87              | 3738.84      | 14.885       | 0.355       | Valid   |
| 29        | 95         | 325          | 10183                | 33.87        | -1330.39             | 3738.84      | -3.738       | 0.355       | Drop    |
| 30        | 111        | 419          | 16297                | 21.55        | 2844.52              | 3738.84      | 10.021       | 0.355       | Valid   |
| 31        | 105        | 381          | 11239                | 25.35        | -1486.32             | 3738.84      | -4.827       | 0.355       | Drop    |

## Lampiran 8

### Perhitungan Uji Validitas untuk Nomor Butir 1 (Tahap Berwirausaha)

1. Kolom  $\Sigma Y_t$  = Jumlah skor total = 3757
2. Kolom  $\Sigma Y_t^2$  = Jumlah kuadrat skor total = 459063
3. Kolom  $\Sigma y_t^2$  =  $\Sigma Y_t^2 - \frac{(\Sigma Y_t)^2}{n} = 459063 - \frac{3757^2}{\#REF!} = \#REF!$
4. Kolom  $\Sigma y_i$  = Jumlah skor tiap butir = 136
5. Kolom  $\Sigma Y_i^2$  = Jumlah kuadrat skor tiap butir  
=  $5^2 + 4^2 + 5^2 + \dots + 5^2$   
= 606
6. Kolom  $\Sigma y_i^2$  =  $\Sigma Y_i^2 - \frac{(\Sigma Y_i)^2}{n} = 606 - \frac{136^2}{\#REF!} = \#REF!$
7. Kolom  $\Sigma Y_i \cdot Y_t$  = Jumlah hasil kali skor tiap butir dengan skor total yang berpasangan  
=  $(5 \times 139) + (4 \times 141) + (5 \times 126) + \dots + (5 \times 167)$   
= 16549
8. Kolom  $\Sigma y_i \cdot y_t$  =  $\Sigma Y_i \cdot Y_t - \frac{(\Sigma Y_i)(\Sigma Y_t)}{n} = 16549 - \frac{136 \times 3757}{\#REF!}$   
= #REF!
9. Kolom  $r_{hitung}$  =  $\frac{\Sigma y_i \cdot y_t}{\sqrt{\Sigma y_i^2 \cdot \Sigma y_t^2}} = \frac{\#REF!}{\sqrt{\#REF! \cdot \#REF!}} = \#REF!$
10. Kriteria valid adalah 0,355 atau lebih, kurang dari 0,355 dinyatakan drop.

Lampiran 11

Perhitungan Kembali Hasil Uji Coba Variabel Y Valid  
Minat Berwirausaha

| No.<br>Resp.     | Butir Pernyataan |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | ΣYt  | ΣYt <sup>2</sup> |       |
|------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------------------|-------|
|                  | 1                | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  |      |                  |       |
| 1                | 5                | 4   | 5   | 5   | 5   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 5   | 3   | 1   | 4   | 4   | 4   | 4   | 2   | 4   | 1   | 4   | 3   | 5   | 5   | 5   | 108  | 11664            |       |
| 2                | 4                | 5   | 3   | 4   | 4   | 4   | 3   | 4   | 5   | 4   | 4   | 4   | 5   | 4   | 3   | 3   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 3   | 3   | 5   | 5   | 99   | 9801             |       |
| 3                | 5                | 4   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 5   | 4   | 4   | 3   | 4   | 3   | 3   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 4   | 4   | 122  | 14884            |       |
| 4                | 4                | 5   | 3   | 3   | 5   | 5   | 4   | 4   | 2   | 5   | 5   | 5   | 3   | 5   | 5   | 2   | 5   | 5   | 5   | 5   | 3   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 137  | 18769            |       |
| 5                | 5                | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 106  | 11236            |       |
| 6                | 4                | 4   | 3   | 4   | 4   | 5   | 4   | 3   | 2   | 5   | 4   | 4   | 3   | 5   | 3   | 3   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 3   | 4   | 5   | 5   | 114  | 12996            |       |
| 7                | 4                | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 2   | 4   | 5   | 5    | 123              | 15129 |
| 8                | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 3   | 5   | 5   | 5   | 4   | 5   | 4   | 3   | 5   | 5   | 5   | 4   | 4   | 5   | 3   | 5   | 4   | 4   | 5   | 5   | 106  | 11236            |       |
| 9                | 5                | 5   | 3   | 3   | 5   | 5   | 5   | 4   | 2   | 5   | 5   | 5   | 2   | 5   | 2   | 1   | 5   | 2   | 5   | 3   | 2   | 4   | 2   | 5   | 3   | 3   | 5   | 5   | 122  | 14884            |       |
| 10               | 4                | 3   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 120  | 14400            |       |
| 11               | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 2   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 2   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 101  | 10201            |       |
| 12               | 4                | 4   | 3   | 3   | 5   | 4   | 3   | 3   | 2   | 4   | 4   | 4   | 3   | 4   | 2   | 2   | 4   | 3   | 3   | 5   | 3   | 4   | 2   | 5   | 4   | 4   | 5   | 5   | 125  | 15625            |       |
| 13               | 4                | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 3   | 4   | 3   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 4   | 3   | 5   | 5   | 131  | 17161            |       |
| 14               | 5                | 5   | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 3   | 4   | 5   | 5   | 115  | 13225            |       |
| 15               | 5                | 5   | 3   | 4   | 4   | 5   | 4   | 4   | 2   | 5   | 4   | 5   | 3   | 5   | 3   | 4   | 5   | 4   | 5   | 4   | 3   | 4   | 3   | 4   | 4   | 4   | 5   | 5   | 106  | 11236            |       |
| 16               | 4                | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 3   | 3   | 4   | 4   | 132  | 17424            |       |
| 17               | 5                | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 5   | 5   | 109  | 11881            |       |
| 18               | 4                | 4   | 3   | 4   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 5   | 5   | 118  | 13924            |       |
| 19               | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 3   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 3   | 4   | 3   | 4   | 5   | 5   | 122  | 14884            |       |
| 20               | 4                | 4   | 4   | 4   | 4   | 5   | 3   | 4   | 4   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 107  | 11449            |       |
| 21               | 4                | 4   | 4   | 3   | 4   | 4   | 3   | 3   | 3   | 4   | 5   | 4   | 3   | 4   | 3   | 3   | 5   | 5   | 5   | 4   | 3   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 96   | 9216             |       |
| 22               | 4                | 3   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 4   | 4   | 4   | 3   | 4   | 3   | 2   | 4   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 3   | 3   | 4   | 4   | 106  | 11236            |       |
| 23               | 4                | 3   | 3   | 3   | 4   | 4   | 4   | 3   | 3   | 5   | 4   | 4   | 4   | 4   | 3   | 3   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 5   | 3   | 3   | 5   | 5   | 116  | 13456            |       |
| 24               | 5                | 4   | 4   | 4   | 5   | 5   | 4   | 3   | 3   | 5   | 4   | 5   | 4   | 5   | 3   | 3   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 3   | 3   | 5   | 5   | 108  | 11664            |       |
| 25               | 4                | 4   | 4   | 4   | 5   | 4   | 5   | 5   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 3   | 3   | 3   | 4   | 2   | 2   | 5   | 5   | 103  | 10609            |       |
| 26               | 4                | 2   | 3   | 4   | 4   | 4   | 3   | 3   | 3   | 5   | 4   | 4   | 3   | 4   | 3   | 2   | 4   | 4   | 5   | 4   | 3   | 4   | 3   | 4   | 3   | 4   | 5   | 5   | 123  | 15129            |       |
| 27               | 5                | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 5   | 126  | 15876            |       |
| 28               | 4                | 4   | 3   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 105  | 11025            |       |
| 29               | 5                | 4   | 3   | 3   | 4   | 4   | 3   | 3   | 3   | 4   | 4   | 4   | 5   | 5   | 3   | 2   | 5   | 4   | 4   | 3   | 3   | 4   | 3   | 4   | 3   | 3   | 5   | 5   | 113  | 12769            |       |
| 30               | 4                | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 5   | 4   | 4   | 3   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 2   | 4   | 3   | 4   | 5   | 133  | 17689            |       |
| 31               | 5                | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 3565 | 413447           |       |
| ΣYi              | 138              | 127 | 117 | 122 | 139 | 136 | 122 | 122 | 105 | 142 | 133 | 137 | 123 | 138 | 110 | 99  | 143 | 135 | 135 | 128 | 113 | 128 | 108 | 136 | 111 | 117 | 150 | 151 |      |                  |       |
| ΣYi <sup>2</sup> | 622              | 535 | 459 | 494 | 631 | 608 | 498 | 500 | 387 | 658 | 577 | 613 | 513 | 624 | 406 | 349 | 667 | 609 | 599 | 542 | 433 | 536 | 398 | 612 | 419 | 461 | 730 | 739 |      |                  |       |

**Data Hasil Perhitungan Kembali Uji Validitas Skor Butir dengan Skor Total  
Variabel x (Minat Berwirausaha)**

$$\Sigma Y_t = 3565$$

$$\Sigma Y_t^2 = 413447$$

| No. Butir | $\Sigma Y$ | $\Sigma Y^2$ | $\Sigma Y \cdot Y_t$ | $\Sigma y^2$ | $\Sigma y \cdot y_t$ | $\Sigma y_t^2$ | $r_{hitung}$ | $r_{tabel}$ | Kesimp. |
|-----------|------------|--------------|----------------------|--------------|----------------------|----------------|--------------|-------------|---------|
| 1         | 138        | 622          | 17223                | 7.68         | 1353.00              | 3472.00        | 8.287        | 0.355       | Valid   |
| 2         | 127        | 535          | 15899                | 14.71        | 1294.00              | 3472.00        | 5.726        | 0.355       | Valid   |
| 3         | 117        | 459          | 14691                | 17.42        | 1236.00              | 3472.00        | 5.026        | 0.355       | Valid   |
| 4         | 122        | 494          | 15330                | 13.87        | 1300.00              | 3472.00        | 5.924        | 0.355       | Valid   |
| 5         | 139        | 631          | 17367                | 7.74         | 1382.00              | 3472.00        | 8.429        | 0.355       | Valid   |
| 6         | 136        | 608          | 17049                | 11.35        | 1409.00              | 3472.00        | 7.096        | 0.355       | Valid   |
| 7         | 122        | 498          | 15334                | 17.87        | 1304.00              | 3472.00        | 5.235        | 0.355       | Valid   |
| 8         | 122        | 500          | 15351                | 19.87        | 1321.00              | 3472.00        | 5.029        | 0.355       | Valid   |
| 9         | 105        | 387          | 13228                | 31.35        | 1153.00              | 3472.00        | 3.495        | 0.355       | Valid   |
| 10        | 142        | 658          | 17720                | 7.55         | 1390.00              | 3472.00        | 8.586        | 0.355       | Valid   |
| 11        | 133        | 577          | 16620                | 6.39         | 1325.00              | 3472.00        | 8.898        | 0.355       | Valid   |
| 12        | 137        | 613          | 17131                | 7.55         | 1376.00              | 3472.00        | 8.500        | 0.355       | Valid   |
| 13        | 123        | 513          | 15479                | 24.97        | 1334.00              | 3472.00        | 4.531        | 0.355       | Valid   |
| 14        | 138        | 624          | 17230                | 9.68         | 1360.00              | 3472.00        | 7.419        | 0.355       | Valid   |
| 15        | 110        | 406          | 13844                | 15.68        | 1194.00              | 3472.00        | 5.118        | 0.355       | Valid   |
| 16        | 99         | 349          | 12517                | 32.84        | 1132.00              | 3472.00        | 3.352        | 0.355       | Valid   |
| 17        | 143        | 667          | 17872                | 7.35         | 1427.00              | 3472.00        | 8.930        | 0.355       | Valid   |
| 18        | 135        | 609          | 16929                | 21.10        | 1404.00              | 3472.00        | 5.188        | 0.355       | Valid   |
| 19        | 135        | 599          | 16903                | 11.10        | 1378.00              | 3472.00        | 7.020        | 0.355       | Valid   |
| 20        | 128        | 542          | 16059                | 13.48        | 1339.00              | 3472.00        | 6.188        | 0.355       | Valid   |
| 21        | 113        | 433          | 14266                | 21.10        | 1271.00              | 3472.00        | 4.696        | 0.355       | Valid   |
| 22        | 128        | 536          | 16023                | 7.48         | 1303.00              | 3472.00        | 8.083        | 0.355       | Valid   |
| 23        | 108        | 398          | 13617                | 21.74        | 1197.00              | 3472.00        | 4.357        | 0.355       | Valid   |
| 24        | 136        | 612          | 17116                | 15.35        | 1476.00              | 3472.00        | 6.393        | 0.355       | Valid   |
| 25        | 111        | 419          | 13980                | 21.55        | 1215.00              | 3472.00        | 4.442        | 0.355       | Valid   |
| 26        | 117        | 461          | 14704                | 19.42        | 1249.00              | 3472.00        | 4.810        | 0.355       | Valid   |
| 27        | 150        | 730          | 18711                | 4.19         | 1461.00              | 3472.00        | 12.108       | 0.355       | Valid   |
| 28        | 151        | 739          | 18832                | 3.48         | 1467.00              | 3472.00        | 13.339       | 0.355       | Valid   |

**Data Hasil Uji Coba Reliabilitas Variabel Y  
Minat Berwirausaha**

| No.      | Varians |
|----------|---------|
| 1        | 0.25    |
| 2        | 0.47    |
| 3        | 0.56    |
| 4        | 0.45    |
| 5        | 0.25    |
| 6        | 0.37    |
| 7        | 0.58    |
| 8        | 0.64    |
| 9        | 1.01    |
| 10       | 0.24    |
| 11       | 0.21    |
| 12       | 0.24    |
| 13       | 0.81    |
| 14       | 0.31    |
| 15       | 0.51    |
| 16       | 1.06    |
| 17       | 0.24    |
| 18       | 0.68    |
| 19       | 0.36    |
| 20       | 0.43    |
| 21       | 0.68    |
| 22       | 0.24    |
| 23       | 0.70    |
| 24       | 0.44    |
| 25       | 0.70    |
| 26       | 0.63    |
| 27       | 0.14    |
| 28       | 0.11    |
| $\Sigma$ | 13.29   |

1. Menghitung Varians tiap butir dengan rumus contoh butir ke 1

$$S_i^2 = \frac{\sum Y_i^2 - \frac{(\sum Y_i)^2}{n}}{n}$$

$$= \frac{622 - \frac{138^2}{\#REF!}}{\#REF!} = 0.25$$

2. Menghitung varians total

$$S_t^2 = \frac{\sum Y_t^2 - \frac{(\sum Y_t)^2}{n}}{n}$$

$$= \frac{413447 - \frac{3565^2}{\#REF!}}{\#REF!} = \#REF!$$

3. Menghitung Reliabilitas

$$r_{11} = \frac{k}{k-1} \left( 1 - \frac{\sum s_i^2}{s_t^2} \right)$$

$$= \frac{28}{28-1} \left( 1 - \frac{13.29}{\#REF!} \right)$$

$$= \#REF!$$

Kesimpulan

Dari perhitungan di atas menunjukkan bahwa  $r_{ii}$  termasuk dalam kategori (0,800 - 1,000). Maka instrumen memiliki **reliabilitas yang sangat tinggi**

Tabel Interpretasi

| Besarnya nilai r | Interpretasi  |
|------------------|---------------|
| 0,800 - 1,000    | Sangat tinggi |
| 0,600 - 0,799    | Tinggi        |
| 0,400 - 0,599    | Cukup         |
| 0,200 - 0,399    | Rendah        |

## Lampiran 1

Jakarta, 18 Juni 2012

Kepada

Siswa-siswi Kelas XI IPS

Di

SMAN 4 Jakarta

Dengan hormat,

Puji syukur kita panjatkan atas kehadiran Tuhan YME yang telah melimpahkan nikmatnya kepada kita semua, dan semoga siswa/siswi senantiasa berada dalam lindungan-Nya dalam menjalankan kegiatan sehari-hari.

Sehubungan dengan kegiatan penelitian yang saya lakukan dalam rangka menyusun skripsi, maka saya mohon kesediaan siswa/siswi mengisi kuesioner yang saya ajukan sehingga dapat digunakan sebagai bahan data penelitian untuk menyusun skripsi dengan judul :

“ Hubungan antara minat berwirausaha dengan hasil belajar kewirausahaan pada siswa kelas XI IPS di SMAN 4 Jakarta “

Perlu diketahui bahwa data yang diperoleh dari jawaban siswa/siswi dijamin kerahasiaannya dan tidak akan mempengaruhi nilai siswa/siswi yang ada sekarang.

Atas bantuan dan kesediaan siswa/siswi yang telah meluangkan waktu mengisikuesioner penelitian ini, saya mengucapkan terima kasih.

Hormat Saya,

Listiya Pujianingsih

### Kuesioner Penelitian untuk UjiCoba (Minat Berwirausaha)

#### Data Responden

**No Responden** :  
**No Reg** :  
**Nama** :  
**Prodi** :

#### **Petunjuk Pengisian :**

1. Isilah terlebih dahulu data responden diatas, kecuali No. Responden.
2. Bacalah Pernyataan dibawah ini dengan seksama sebelum menjawab.
3. Pilih dan berilah tanda checklist (√) atau tanda silang (X) pada kolom pilihan jawaban yang sesuai dengan pendapat anda
4. Alternatif jawaban yang dapat anda pilih :  
 SS = Sangat Setuju  
 S = Setuju  
 KS = Kurang Setuju  
 TS = Tidak Setuju  
 STS= Sangat Tidak Setuju
5. Periksa kembali jawaban yang telah anda isi

| No | Pernyataan  | SS | S | KS | TS | STS |
|----|---|----|---|----|----|-----|
| 1  | Dengan berwirausaha akan mengurangi pengangguran  |    |   |    |    |     |
| 2  | Wirausaha itu merupakan profesi yang menarik  |    |   |    |    |     |
| 3  | Berwirausaha akan meningkatkan kesejahteraan keluarga                                   |    |   |    |    |     |
| 4  | Sejak kecil saya berkeinginan menjad iwirausaha   |    |   |    |    |     |
| 5  | Saya dapat hidup mandiri melalui wirausaha  |    |   |    |    |     |
| 6  | Saya tidak yakin menjadi orang sukses dengan berwirausaha                               |    |   |    |    |     |
| 7  | Berwirausaha dapat meningkatkan perekonomian keluarga                                   |    |   |    |    |     |
| 8  | Saya memiliki waktu yang fleksibel bila menjadi wirausaha                               |    |   |    |    |     |
| 9  | Saya tidak yakin mampu mengelola suatu usaha  |    |   |    |    |     |
| 10 | Setelah lulus sekolah, saya lebih memilih mencari pekerjaan dari pada mencoba wirausaha |    |   |    |    |     |
| 11 | Saya yakin dengan kemampuan yang saya miliki, saya dapat merintis suatu wirausaha       |    |   |    |    |     |



|    |  |  |  |  |  |  |
|----|--|--|--|--|--|--|
| 12 | Dorongan dari teman dan keluarga menambah keinginan saya berwirausaha  |  |  |  |  |  |
| 13 | Anggapan miring masyarakat tentang wirausaha, membuat Saya tidak tertarik menjadi wirausaha                        |  |  |  |  |  |
| 14 | Saya tidak berani menanggung resiko jika berwirausaha  |  |  |  |  |  |
| 15 | Saya tidak menyukai persaingan dalam dunia usaha   |  |  |  |  |  |
| 16 | Berwirausaha merupakan peluang saya menjadi sukses   |  |  |  |  |  |
| 17 | Saya yakin akan berhasil dalam berwirausaha  |  |  |  |  |  |
| 18 | Setelah melihat banyak generasi muda yang sukses dalam berwirausaha, menambah ketertarikan saya dalam berwirausaha |  |  |  |  |  |
| 19 | Saya berambisi mensejahterakan keluarga dan masyarakat melalui wirausaha   |  |  |  |  |  |
| 20 | Saya sering membaca kisah para wirausaha yang sukses   |  |  |  |  |  |
| 21 | Saya takut tertipu bila menjadi wirausaha  |  |  |  |  |  |
| 22 | Saya enggan berwirausaha walaupun belum mendapatkan pekerjaan  |  |  |  |  |  |
| 23 | Saya merasa kurang mampu memimpin suatu usaha  |  |  |  |  |  |
| 24 | Dengan berwirausaha dapat mengejar mimpi saya  |  |  |  |  |  |
| 25 | Materi kewirausahaan bias menjadi bekal untuk berwirausaha   |  |  |  |  |  |
| 26 | Berwirausaha bukan suatu yang mudah  |  |  |  |  |  |
| 27 | Saya tidak takut gagal dalam berwirausaha  |  |  |  |  |  |
| 28 | Saya takut rugi bila menjadi wirausaha   |  |  |  |  |  |
| 29 | Pengetahuan kewirausahaan mendorong saya menjadi wirausaha   |  |  |  |  |  |
| 30 | Untuk memulai menjadi wirausaha diperlukan tekad yang kuat dari diri sendiri                                       |  |  |  |  |  |
| 31 | Saya akan mencari peluang usaha walaupun banyak hambatan   |  |  |  |  |  |

Lampiran2

Jakarta, 25 Juni 2012

Kepada

Siswa-siswi Kelas XI IPS

Di

SMAN 4 Jakarta

Dengan hormat,

Puji syukur kita panjatkan atas kehadiran Tuhan YME yang telah melimpahkan nikmatnya kepada kita semua, dan semoga siswa/siswi senantiasa berada dalam lindungan-Nya dalam menjalankan kegiatan sehari-hari.

Sehubungan dengan kegiatan penelitian yang saya lakukan dalam rangka menyusun skripsi, maka saya mohon kesediaan siswa/siswi mengisi kuesioner yang saya ajukan sehingga dapat digunakan sebagai bahan data penelitian untuk menyusun skripsi dengan judul :

“ Hubungan antara minat berwirausaha dengan hasil belajar kewirausahaan pada siswa kelas XI IPS di SMAN 4 Jakarta “

Perlu diketahui bahwa data yang diperoleh dari jawaban siswa/siswi dijamin kerahasiaannya dan tidak akan mempengaruhi nilai siswa/siswi yang ada sekarang.

Atas bantuan dan kesediaan siswa/siswi yang telah meluangkan waktu mengisikuesioner penelitian ini, saya mengucapkan terima kasih.

Hormat Saya,

Listiya Pujianingsih

### Kuesioner Penelitian untuk UjiCoba (Minat Berwirausaha)

#### Data Responden

**No Responden** :  
**No Reg** :  
**Nama** :  
**Prodi** :

#### **Petunjuk Pengisian :**

1. Isilah terlebih dahulu data responden diatas, kecuali No. Responden.
2. Bacalah Pernyataan dibawah ini dengan seksama sebelum menjawab.
3. Pilih dan berilah tanda checklist (√) atau tanda silang (X) pada kolom pilihan jawaban yang sesuai dengan pendapat anda
4. Alternatif jawaban yang dapat anda pilih :  
 SS = Sangat Setuju  
 S = Setuju  
 KS = Kurang Setuju  
 TS = Tidak Setuju  
 STS= Sangat Tidak Setuju
5. Periksa kembali jawaban yang telah anda isi

| No | Pernyataan  | SS | S | KS | TS | STS |
|----|---|----|---|----|----|-----|
| 1  | Dengan berwirausaha akan mengurangi pengangguran  |    |   |    |    |     |
| 2  | Wirausaha itu merupakan profesi yang menarik  |    |   |    |    |     |
| 3  | Berwirausaha akan meningkatkan kesejahteraan keluarga                                   |    |   |    |    |     |
| 4  | Sejak kecil saya berkeinginan menjad iwirausaha   |    |   |    |    |     |
| 5  | Saya dapat hidup mandiri melalui wirausaha  |    |   |    |    |     |
| 6  | Saya tidak yakin menjadi orang sukses dengan berwirausaha                               |    |   |    |    |     |
| 7  | Berwirausaha dapat meningkatkan perekonomian keluarga                                   |    |   |    |    |     |
| 8  | Saya memiliki waktu yang fleksibel bila menjadi wirausaha                               |    |   |    |    |     |
| 9  | Saya tidak yakin mampu mengelola suatu usaha  |    |   |    |    |     |
| 10 | Setelah lulus sekolah, saya lebih memilih mencari pekerjaan dari pada mencoba wirausaha |    |   |    |    |     |
| 11 | Saya yakin dengan kemampuan yang saya miliki, saya dapat merintis suatu wirausaha       |    |   |    |    |     |

|    |  |  |  |  |  |  |
|----|--|--|--|--|--|--|
| 12 | Anggapan miring masyarakat tentang wirausaha, membuat Saya tidak tertarik menjadi wirausaha                        |  |  |  |  |  |
| 13 | Saya tidak berani menanggung resiko jika berwirausaha  |  |  |  |  |  |
| 14 | Saya tidak menyukai persaingan dalam dunia usaha   |  |  |  |  |  |
| 15 | Berwirausaha merupakan peluang saya menjadi sukses   |  |  |  |  |  |
| 16 | Saya yakin akan berhasil dalam berwirausaha  |  |  |  |  |  |
| 17 | Setelah melihat banyak generasi muda yang sukses dalam berwirausaha, menambah ketertarikan saya dalam berwirausaha |  |  |  |  |  |
| 18 | Saya berambisi mensejahterakan keluarga dan masyarakat melalui wirausaha   |  |  |  |  |  |
| 19 | Saya sering membaca kisah parawirausaha yang sukses  |  |  |  |  |  |
| 20 | Saya takut tertipu bila menjadi wirausaha  |  |  |  |  |  |
| 21 | Saya enggan berwirausaha walaupun belum mendapatkan pekerjaan  |  |  |  |  |  |
| 22 | Saya merasa kurang mampu memimpin suatu usaha  |  |  |  |  |  |
| 23 | Dengan berwirausaha dapat mengejar mimpi saya  |  |  |  |  |  |
| 24 | Materi kewirausahaan bias menjadi bekal untuk berwirausaha   |  |  |  |  |  |
| 25 | Berwirausaha bukan suatu yang mudah  |  |  |  |  |  |
| 26 | Saya tidak takut gagal dalam berwirausaha  |  |  |  |  |  |
| 27 | Saya takut rugi bila menjadi wirausaha   |  |  |  |  |  |
| 28 | Untuk memulai menjadi wirausaha diperlukan tekad yang kuat dari diri sendiri                                       |  |  |  |  |  |

**Data Penelitian**  
**Variabel X (Minat Berwirausaha)**

| No.<br>Resp. | Butir Pernyataan |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     | Skor<br>Total |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|---------------|
|              | 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27  | 28  |               |
| 1            | 5                | 3 | 4 | 5 | 4 | 3 | 5 | 4 | 5 | 4  | 3  | 5  | 3  | 4  | 5  | 3  | 4  | 5  | 3  | 3  | 4  | 3  | 4  | 3  | 3  | 5  | 4   | 5   | 111           |
| 2            | 5                | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5  | 5  | 4  | 5  | 4  | 4  | 4  | 5  | 3  | 5  | 5  | 3  | 4  | 3  | 5  | 4  | 5  | 4   | 124 |               |
| 3            | 4                | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3  | 4  | 3  | 3  | 5  | 4  | 3  | 4  | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 4  | 3  | 5   | 100 |               |
| 4            | 5                | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5  | 4  | 4  | 4  | 3  | 4  | 4  | 5  | 3  | 3  | 5  | 3  | 4  | 5  | 4  | 5  | 5  | 5   | 123 |               |
| 5            | 5                | 3 | 5 | 4 | 3 | 5 | 3 | 5 | 5 | 3  | 5  | 5  | 4  | 5  | 4  | 3  | 5  | 5  | 5  | 4  | 4  | 5  | 4  | 4  | 5  | 5  | 3   | 121 |               |
| 6            | 4                | 4 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 3  | 4  | 4  | 3  | 5  | 4  | 4  | 5  | 4  | 4  | 4  | 3  | 3  | 3  | 5  | 3  | 5  | 5   | 111 |               |
| 7            | 5                | 4 | 5 | 5 | 3 | 5 | 3 | 5 | 5 | 5  | 3  | 5  | 3  | 5  | 5  | 3  | 5  | 5  | 4  | 3  | 4  | 5  | 4  | 3  | 4  | 4  | 4   | 118 |               |
| 8            | 4                | 3 | 3 | 5 | 5 | 4 | 5 | 5 | 5 | 5  | 5  | 5  | 5  | 5  | 4  | 5  | 5  | 5  | 5  | 5  | 5  | 5  | 3  | 5  | 3  | 3  | 4   | 124 |               |
| 9            | 5                | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4  | 4  | 4  | 3  | 5  | 4  | 3  | 4  | 3  | 4  | 4  | 4  | 3  | 4  | 3  | 4  | 4  | 4   | 105 |               |
| 10           | 5                | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 3  | 4  | 4  | 4  | 5  | 4  | 4  | 3  | 4  | 3  | 4  | 3  | 3  | 3  | 3  | 4  | 4  | 4   | 107 |               |
| 11           | 5                | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3  | 4  | 3  | 3  | 5  | 5  | 3  | 4  | 4  | 3  | 4  | 4  | 3  | 4  | 4  | 4  | 4  | 4   | 104 |               |
| 12           | 5                | 4 | 5 | 3 | 5 | 2 | 3 | 5 | 3 | 5  | 5  | 4  | 5  | 5  | 4  | 5  | 5  | 5  | 4  | 3  | 4  | 5  | 5  | 4  | 4  | 3  | 4   | 118 |               |
| 13           | 3                | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3  | 2  | 2  | 3  | 3  | 3  | 2  | 2  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 3   | 2   | 68            |
| 14           | 4                | 4 | 4 | 3 | 4 | 5 | 3 | 5 | 4 | 3  | 3  | 3  | 4  | 4  | 4  | 5  | 4  | 5  | 3  | 5  | 5  | 3  | 4  | 3  | 4  | 3  | 4   | 108 |               |
| 15           | 5                | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 5  | 5  | 5  | 3  | 4  | 4  | 3  | 4  | 3  | 3  | 3  | 4  | 3  | 4  | 3  | 5  | 4  | 4   | 107 |               |
| 16           | 5                | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3  | 3  | 3  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 3  | 4  | 3  | 3  | 3   | 102 |               |
| 17           | 5                | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 5  | 3  | 5  | 5  | 4  | 5  | 3  | 5  | 4  | 5   | 125 |               |
| 18           | 5                | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 4  | 5  | 5  | 4   | 112 |               |
| 19           | 5                | 4 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 3  | 4  | 4  | 4  | 5  | 4  | 3  | 3  | 4  | 3  | 4  | 3  | 3  | 3  | 3  | 4  | 4  | 4   | 106 |               |
| 20           | 3                | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3  | 2  | 2  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 3  | 3  | 3  | 3  | 3  | 3   | 2   | 78            |
| 21           | 5                | 3 | 3 | 3 | 5 | 3 | 3 | 5 | 5 | 4  | 4  | 3  | 5  | 5  | 5  | 3  | 5  | 5  | 3  | 4  | 5  | 3  | 4  | 3  | 4  | 3  | 5   | 113 |               |
| 22           | 5                | 4 | 3 | 5 | 4 | 4 | 4 | 5 | 5 | 4  | 3  | 5  | 4  | 4  | 4  | 3  | 4  | 5  | 4  | 5  | 4  | 4  | 4  | 5  | 5  | 4  | 5   | 120 |               |
| 23           | 5                | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 4 | 5  | 5  | 3  | 4  | 5  | 5  | 5  | 4  | 5  | 5  | 5  | 5  | 4  | 3  | 4  | 4  | 5  | 4   | 125 |               |
| 24           | 5                | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5  | 5  | 4  | 4  | 5  | 5  | 3  | 3  | 5  | 4  | 5  | 5  | 5  | 4  | 5  | 5  | 5  | 4   | 126 |               |
| 25           | 4                | 5 | 3 | 4 | 4 | 5 | 5 | 3 | 2 | 3  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 5  | 5  | 5  | 5  | 5  | 5  | 2  | 5   | 116 |               |
| 26           | 4                | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 5  | 4  | 5  | 5  | 5  | 4  | 3  | 4  | 5  | 3  | 5  | 3  | 5  | 3  | 3  | 5  | 3  | 3   | 108 |               |
| 27           | 5                | 3 | 3 | 3 | 3 | 4 | 3 | 5 | 5 | 3  | 3  | 2  | 4  | 5  | 4  | 3  | 4  | 5  | 3  | 4  | 5  | 3  | 4  | 4  | 5  | 3  | 5   | 106 |               |
| 28           | 4                | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 3  | 3  | 4  | 3  | 4  | 4  | 4  | 3  | 3  | 3  | 3  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 102 |               |
| 29           | 5                | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5  | 3  | 5  | 3  | 5  | 5  | 3  | 3  | 5  | 3  | 3  | 3  | 3  | 4  | 3  | 5  | 5  | 4   | 117 |               |
| 30           | 5                | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4  | 4  | 4  | 4  | 4  | 4  | 3  | 4  | 3  | 3  | 3  | 3  | 4  | 4  | 4  | 5  | 5  | 4   | 113 |               |
| 31           | 4                | 3 | 3 | 3 | 5 | 4 | 4 | 5 | 4 | 5  | 3  | 4  | 4  | 5  | 4  | 4  | 5  | 3  | 3  | 5  | 3  | 5  | 3  | 4  | 3  | 4  | 4   | 110 |               |
| 32           | 5                | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3  | 4  | 3  | 3  | 5  | 5  | 3  | 4  | 4  | 3  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4   | 107 |               |
| 33           | 4                | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3  | 4  | 3  | 5  | 5  | 4  | 3  | 4  | 4  | 5  | 5  | 5  | 3  | 5  | 3  | 5  | 2  | 4   | 108 |               |
| 34           | 5                | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 5  | 5  | 5  | 3  | 4  | 4  | 3  | 4  | 3  | 3  | 4  | 4  | 3  | 4  | 3  | 5  | 4  | 4   | 108 |               |
| 35           | 4                | 4 | 4 | 3 | 4 | 5 | 3 | 5 | 4 | 3  | 3  | 3  | 4  | 4  | 4  | 5  | 4  | 5  | 3  | 5  | 5  | 3  | 4  | 3  | 4  | 4  | 4   | 109 |               |
| 36           | 3                | 3 | 3 | 3 | 3 | 2 | 5 | 3 | 5 | 5  | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 5  | 4  | 3  | 3  | 3  | 3  | 3   | 102 |               |
| 37           | 5                | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3  | 4  | 3  | 3  | 5  | 5  | 3  | 4  | 4  | 3  | 4  | 4  | 3  | 5  | 4  | 4  | 4  | 4   | 105 |               |
| 38           | 5                | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4  | 4  | 4  | 3  | 5  | 4  | 3  | 4  | 3  | 4  | 4  | 4  | 3  | 4  | 3  | 4  | 4  | 4   | 105 |               |
| 39           | 5                | 3 | 4 | 3 | 5 | 4 | 3 | 3 | 5 | 3  | 3  | 3  | 5  | 3  | 5  | 4  | 5  | 5  | 4  | 4  | 5  | 5  | 5  | 4  | 4  | 3  | 5   | 115 |               |
| 40           | 4                | 5 | 4 | 3 | 4 | 5 | 3 | 4 | 4 | 3  | 3  | 3  | 3  | 5  | 5  | 3  | 5  | 5  | 4  | 4  | 3  | 3  | 4  | 5  | 4  | 3  | 5   | 110 |               |
| 41           | 4                | 5 | 4 | 3 | 4 | 5 | 3 | 4 | 4 | 3  | 3  | 3  | 3  | 5  | 5  | 3  | 5  | 5  | 4  | 4  | 3  | 4  | 3  | 5  | 4  | 3  | 5   | 110 |               |
| 42           | 5                | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3  | 3  | 3  | 3  | 3  | 5  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 4  | 4  | 4  | 3  | 4   | 95  |               |
| 43           | 4                | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3  | 3  | 3  | 3  | 4  | 4  | 3  | 3  | 4  | 3  | 4  | 4  | 3  | 4  | 5  | 3  | 3  | 3   | 97  |               |
| 44           | 4                | 5 | 4 | 3 | 4 | 5 | 3 | 4 | 4 | 3  | 3  | 3  | 3  | 5  | 5  | 3  | 5  | 5  | 4  | 4  | 3  | 4  | 3  | 5  | 4  | 3  | 110 |     |               |
| 45           | 5                | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 4  | 5  | 4  | 4  | 4  | 4  | 5  | 4   | 122 |               |
| 46           | 5                | 4 | 4 | 3 | 4 | 4 | 3 | 5 | 5 | 3  | 3  | 3  | 3  | 5  | 5  | 3  | 3  | 5  | 3  | 5  | 5  | 5  | 3  | 3  | 5  | 5  | 4   | 113 |               |
| 47           | 5                | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4  | 4  | 4  | 3  | 5  | 4  | 3  | 4  | 3  | 4  | 4  | 4  | 3  | 4  | 3  | 4  | 4  | 4   | 105 |               |

|    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 48 | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 3   | 4   | 3   | 3   | 3   | 3   | 4   | 4   | 4   | 5   | 5   | 4   | 5   | 114  |
| 49 | 5   | 4   | 4   | 3   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 3   | 5   | 5   | 5   | 4   | 3   | 5   | 4   | 3   | 3   | 5   | 3   | 4   | 3   | 5   | 5   | 3   | 114  |
| 50 | 5   | 4   | 4   | 3   | 3   | 3   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 5   | 3   | 4   | 3   | 3   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 113  |
| 51 | 4   | 3   | 4   | 3   | 4   | 3   | 3   | 4   | 4   | 3   | 4   | 3   | 3   | 4   | 4   | 3   | 3   | 4   | 4   | 4   | 3   | 2   | 3   | 4   | 4   | 4   | 4   | 3   | 98   |
| 52 | 5   | 3   | 4   | 5   | 4   | 3   | 2   | 4   | 4   | 3   | 2   | 3   | 2   | 4   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 117  |
| 53 | 5   | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 124  |
| 54 | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 121  |
| 55 | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 5   | 4   | 5   | 5   | 2   | 5   | 5   | 4   | 5   | 4   | 5   | 5   | 5   | 5   | 129  |
| 56 | 5   | 4   | 3   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 3   | 3   | 3   | 3   | 4   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 4   | 4   | 5   | 5   | 3   | 3   | 103  |
| 57 | 4   | 5   | 4   | 5   | 5   | 3   | 3   | 4   | 5   | 3   | 5   | 5   | 3   | 4   | 4   | 5   | 5   | 4   | 3   | 5   | 4   | 3   | 5   | 5   | 5   | 5   | 3   | 4   | 116  |
| 58 | 5   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 5   | 4   | 120  |
| 59 | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 136  |
| 60 | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 136  |
| 61 | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 5   | 133  |
| 62 | 5   | 5   | 4   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 5   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 124  |
| 63 | 4   | 3   | 4   | 4   | 5   | 5   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 109  |
| 64 | 4   | 4   | 4   | 5   | 4   | 5   | 5   | 4   | 5   | 4   | 5   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 3   | 4   | 3   | 4   | 5   | 4   | 4   | 5   | 119  |
| 65 | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 5   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 111  |
| 66 | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 125  |
| 67 | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 3   | 3   | 4   | 4   | 4   | 3   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 112  |
| 68 | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 110  |
| 69 | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 3   | 5   | 5   | 4   | 5   | 4   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 127  |
| 70 | 4   | 4   | 4   | 3   | 4   | 4   | 3   | 3   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 4   | 3   | 4   | 4   | 4   | 4   | 3   | 4   | 105  |
| 71 | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 5   | 5   | 4   | 4   | 5   | 5   | 120  |
| 72 | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 4   | 5   | 5   | 4   | 4   | 4   | 119  |
| 73 | 4   | 5   | 4   | 5   | 4   | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 121  |
| 74 | 5   | 4   | 5   | 4   | 5   | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 4   | 5   | 4   | 5   | 4   | 5   | 4   | 4   | 3   | 4   | 3   | 4   | 4   | 5   | 5   | 5   | 121  |
| 75 | 4   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 4   | 5   | 4   | 4   | 4   | 5   | 5   | 4   | 5   | 5   | 127  |
| 76 | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 3   | 4   | 4   | 5   | 5   | 5   | 5   | 5   | 131  |
| 77 | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 5   | 4   | 5   | 5   | 5   | 4   | 5   | 4   | 3   | 5   | 4   | 5   | 3   | 4   | 4   | 5   | 4   | 4   | 4   | 4   | 5   | 123  |
| 78 | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 3   | 5   | 5   | 5   | 5   | 5   | 5   | 4   | 4   | 5   | 5   | 5   | 4   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 129  |
| Σ  | 352 | 315 | 309 | 300 | 318 | 317 | 287 | 323 | 318 | 304 | 305 | 301 | 293 | 340 | 332 | 279 | 317 | 325 | 286 | 318 | 303 | 299 | 306 | 304 | 328 | 307 | 330 | 311 | 8856 |

| NAMA SISWA | VARIABEL X | VARIABEL Y |
|------------|------------|------------|
|            | 111        | 70         |
|            | 124        | 76         |
|            | 100        | 70         |
|            | 123        | 72         |
|            | 121        | 80         |
|            | 111        | 70         |
|            | 118        | 70         |
|            | 124        | 74         |
|            | 105        | 70         |
|            | 107        | 75         |
|            | 104        | 72         |
|            | 118        | 77         |
|            | 68         | 64         |
|            | 108        | 70         |
|            | 107        | 73         |
|            | 102        | 70         |
|            | 125        | 74         |
|            | 112        | 72         |
|            | 106        | 72         |
|            | 78         | 70         |
|            | 113        | 78         |
|            | 120        | 76         |
|            | 125        | 75         |
|            | 126        | 76         |
|            | 116        | 70         |
|            | 108        | 75         |
|            | 106        | 65         |
|            | 102        | 68         |
|            | 117        | 75         |
|            | 113        | 75         |
|            | 110        | 73         |
|            | 107        | 68         |
|            | 108        | 70         |
|            | 108        | 71         |
|            | 109        | 72         |
|            | 102        | 77         |
|            | 105        | 75         |
|            | 105        | 70         |
|            | 115        | 76         |
|            | 110        | 73         |
|            | 110        | 73         |
|            | 95         | 74         |
|            | 97         | 65         |
|            | 110        | 74         |

**Data Berpasangan Variabel X dan Variabel Y**

| No. Resp | K  | n | X   | Y  | X <sup>2</sup> | Y <sup>2</sup> | XY   |
|----------|----|---|-----|----|----------------|----------------|------|
| 13       | 1  | 1 | 68  | 64 | 4624           | 4096           | 4352 |
| 20       | 2  | 1 | 78  | 70 | 6084           | 4900           | 5460 |
| 42       | 3  | 1 | 95  | 74 | 9025           | 5476           | 7030 |
| 43       | 4  | 1 | 97  | 65 | 9409           | 4225           | 6305 |
| 51       | 5  | 1 | 98  | 66 | 9604           | 4356           | 6468 |
| 3        | 6  | 1 | 100 | 70 | 10000          | 4900           | 7000 |
| 16       | 7  | 3 | 102 | 70 | 10404          | 4900           | 7140 |
| 28       |    |   | 102 | 68 | 10404          | 4624           | 6936 |
| 36       |    |   | 102 | 77 | 10404          | 5929           | 7854 |
| 56       | 8  | 1 | 103 | 74 | 10609          | 5476           | 7622 |
| 11       | 9  | 1 | 104 | 72 | 10816          | 5184           | 7488 |
| 9        | 10 | 5 | 105 | 70 | 11025          | 4900           | 7350 |
| 37       |    |   | 105 | 75 | 11025          | 5625           | 7875 |
| 38       |    |   | 105 | 70 | 11025          | 4900           | 7350 |
| 47       |    |   | 105 | 74 | 11025          | 5476           | 7770 |
| 70       |    |   | 105 | 70 | 11025          | 4900           | 7350 |
| 19       | 11 | 2 | 106 | 72 | 11236          | 5184           | 7632 |
| 27       |    |   | 106 | 65 | 11236          | 4225           | 6890 |
| 10       | 12 | 3 | 107 | 75 | 11449          | 5625           | 8025 |
| 15       |    |   | 107 | 73 | 11449          | 5329           | 7811 |
| 32       |    |   | 107 | 68 | 11449          | 4624           | 7276 |
| 14       | 13 | 4 | 108 | 70 | 11664          | 4900           | 7560 |
| 26       |    |   | 108 | 75 | 11664          | 5625           | 8100 |
| 33       |    |   | 108 | 70 | 11664          | 4900           | 7560 |
| 34       |    |   | 108 | 71 | 11664          | 5041           | 7668 |
| 35       | 14 | 2 | 109 | 72 | 11881          | 5184           | 7848 |
| 63       |    |   | 109 | 74 | 11881          | 5476           | 8066 |
| 31       | 15 | 5 | 110 | 73 | 12100          | 5329           | 8030 |
| 40       |    |   | 110 | 73 | 12100          | 5329           | 8030 |
| 41       |    |   | 110 | 73 | 12100          | 5329           | 8030 |
| 44       |    |   | 110 | 74 | 12100          | 5476           | 8140 |
| 68       |    |   | 110 | 71 | 12100          | 5041           | 7810 |
| 1        | 16 | 3 | 111 | 70 | 12321          | 4900           | 7770 |
| 6        |    |   | 111 | 70 | 12321          | 4900           | 7770 |
| 65       |    |   | 111 | 71 | 12321          | 5041           | 7881 |
| 18       | 17 | 2 | 112 | 72 | 12544          | 5184           | 8064 |
| 67       |    |   | 112 | 78 | 12544          | 6084           | 8736 |
| 21       | 18 | 4 | 113 | 78 | 12769          | 6084           | 8814 |
| 30       |    |   | 113 | 75 | 12769          | 5625           | 8475 |
| 46       |    |   | 113 | 74 | 12769          | 5476           | 8362 |
| 50       |    |   | 113 | 74 | 12769          | 5476           | 8362 |
| 48       | 19 | 2 | 114 | 74 | 12996          | 5476           | 8436 |
| 49       |    |   | 114 | 72 | 12996          | 5184           | 8208 |
| 39       | 20 | 1 | 115 | 76 | 13225          | 5776           | 8740 |
| 25       | 21 | 2 | 116 | 70 | 13456          | 4900           | 8120 |
| 57       |    |   | 116 | 73 | 13456          | 5329           | 8468 |
| 29       | 22 | 2 | 117 | 75 | 13689          | 5625           | 8775 |
| 52       |    |   | 117 | 71 | 13689          | 5041           | 8307 |



|          |           |           |             |             |                |               |               |
|----------|-----------|-----------|-------------|-------------|----------------|---------------|---------------|
| 7        | 23        | 2         | 118         | 70          | 13924          | 4900          | 8260          |
| 12       |           |           | 118         | 77          | 13924          | 5929          | 9086          |
| 64       | 24        | 2         | 119         | 74          | 14161          | 5476          | 8806          |
| 72       |           |           | 119         | 70          | 14161          | 4900          | 8330          |
| 22       | 25        | 3         | 120         | 76          | 14400          | 5776          | 9120          |
| 58       |           |           | 120         | 75          | 14400          | 5625          | 9000          |
| 71       |           |           | 120         | 70          | 14400          | 4900          | 8400          |
| 5        | 26        | 4         | 121         | 80          | 14641          | 6400          | 9680          |
| 54       |           |           | 121         | 72          | 14641          | 5184          | 8712          |
| 73       |           |           | 121         | 71          | 14641          | 5041          | 8591          |
| 74       |           |           | 121         | 70          | 14641          | 4900          | 8470          |
| 45       | 27        | 1         | 122         | 75          | 14884          | 5625          | 9150          |
| 4        | 28        | 2         | 123         | 72          | 15129          | 5184          | 8856          |
| 77       |           |           | 123         | 73          | 15129          | 5329          | 8979          |
| 2        | 29        | 4         | 124         | 76          | 15376          | 5776          | 9424          |
| 8        |           |           | 124         | 74          | 15376          | 5476          | 9176          |
| 53       |           |           | 124         | 72          | 15376          | 5184          | 8928          |
| 62       |           |           | 124         | 75          | 15376          | 5625          | 9300          |
| 17       | 30        | 3         | 125         | 74          | 15625          | 5476          | 9250          |
| 23       |           |           | 125         | 75          | 15625          | 5625          | 9375          |
| 66       |           |           | 125         | 75          | 15625          | 5625          | 9375          |
| 24       | 31        | 1         | 126         | 76          | 15876          | 5776          | 9576          |
| 69       | 32        | 2         | 127         | 74          | 16129          | 5476          | 9398          |
| 75       |           |           | 127         | 76          | 16129          | 5776          | 9652          |
| 55       | 33        | 2         | 129         | 80          | 16641          | 6400          | 10320         |
| 78       |           |           | 129         | 78          | 16641          | 6084          | 10062         |
| 76       | 34        | 1         | 131         | 74          | 17161          | 5476          | 9694          |
| 61       | 35        | 1         | 133         | 72          | 17689          | 5184          | 9576          |
| 59       | 36        | 2         | 136         | 82          | 18496          | 6724          | 11152         |
| 60       |           |           | 136         | 79          | 18496          | 6241          | 10744         |
| <b>Σ</b> | <b>36</b> | <b>78</b> | <b>8856</b> | <b>5688</b> | <b>1015592</b> | <b>415678</b> | <b>647556</b> |

### Perhitungan Uji Linieritas dengan Persamaan Regresi Linier

Diketahui

|              |   |         |
|--------------|---|---------|
| n            | = | 78      |
| $\Sigma X$   | = | 8856    |
| $\Sigma X^2$ | = | 1015592 |
| $\Sigma Y$   | = | 5688    |
| $\Sigma Y^2$ | = | 415678  |
| $\Sigma XY$  | = | 647556  |

Di masukan ke dalam rumus :

$$\begin{aligned}
 a &= \frac{(\Sigma Y)(\Sigma X^2) - (\Sigma X)(\Sigma XY)}{n \Sigma X^2 - (\Sigma X)^2} \\
 &= \frac{5688 \quad 1015592 - 8856 \quad 647556}{78 \quad 1015592 - 8856} \\
 &= \frac{5776687296 - 5734755936}{79216176 - 78428736} \\
 &= \frac{41931360}{787440} \\
 &= \underline{\underline{\mathbf{53.25}}}
 \end{aligned}$$

$$\begin{aligned}
 b &= \frac{n \Sigma XY - (\Sigma X)(\Sigma Y)}{n \Sigma X^2 - (\Sigma X)^2} \\
 &= \frac{78 \quad 647556 - 8856 \quad 5688}{78 \quad 1015592 - 78428736} \\
 &= \frac{50509368 - 50372928}{79216176 - 78428736} \\
 &= \frac{136440}{787440} \\
 &= \underline{\underline{\mathbf{0.17}}}
 \end{aligned}$$

Jadi Persamaannya adalah :

$$\hat{Y} = 53.25 + 0.17$$

### Perhitungan Rata-rata, Varians dan Simpangan Bak

**Variabel X**

**Variabel Y**

**Rata-rata :**

$$\begin{aligned}\bar{X} &= \frac{\sum X}{n} \\ &= \frac{8856}{78} \\ &= \underline{\underline{113.54}}\end{aligned}$$

$$\begin{aligned}\bar{Y} &= \frac{\sum Y}{n} \\ &= \frac{5688}{78} \\ &= \underline{\underline{72.92}}\end{aligned}$$

**Varians :**

$$\begin{aligned}S^2 &= \frac{\sum(\bar{X}-X)^2}{n-1} \\ &= \frac{11756.48}{77} \\ &= \underline{\underline{152.682}}\end{aligned}$$

$$\begin{aligned}S^2 &= \frac{\sum(Y-\bar{Y})^2}{n-1} \\ &= \frac{891.54}{77} \\ &= \underline{\underline{11.578}}\end{aligned}$$

**Simpangan Baku**

$$\begin{aligned}SD &= \sqrt{S^2} \\ &= \sqrt{152.682} \\ &= \underline{\underline{12.356}}\end{aligned}$$

$$\begin{aligned}SD &= \sqrt{S^2} \\ &= \sqrt{11.578} \\ &= \underline{\underline{3.403}}\end{aligned}$$

**Tabel Perhitungan Rata-rata,  
Varians dan Simpangan Baku, Variabel X dan Y**

| NO. | X   | Y  | $X - \bar{X}$ | $Y - \bar{Y}$ | $(X - \bar{X})^2$ | $(Y - \bar{Y})^2$ |
|-----|-----|----|---------------|---------------|-------------------|-------------------|
| 1   | 111 | 70 | -2.54         | -2.92         | 6.44              | 8.54              |
| 2   | 124 | 76 | 10.46         | 3.08          | 109.44            | 9.47              |
| 3   | 100 | 70 | -13.54        | -2.92         | 183.29            | 8.54              |
| 4   | 123 | 72 | 9.46          | -0.92         | 89.52             | 0.85              |
| 5   | 121 | 80 | 7.46          | 7.08          | 55.67             | 50.08             |
| 6   | 111 | 70 | -2.54         | -2.92         | 6.44              | 8.54              |
| 7   | 118 | 70 | 41.00         | -2.92         | 1681.00           | 8.54              |
| 8   | 124 | 74 | 10.46         | 1.08          | 109.44            | 1.16              |
| 9   | 105 | 70 | -8.54         | -2.92         | 72.91             | 8.54              |
| 10  | 107 | 75 | -6.54         | 2.08          | 42.75             | 4.31              |
| 11  | 104 | 72 | -9.54         | -0.92         | 90.98             | 0.85              |
| 12  | 118 | 77 | 4.46          | 4.08          | 19.91             | 16.62             |
| 13  | 68  | 64 | -45.54        | -8.92         | 2073.75           | 79.62             |
| 14  | 108 | 70 | -5.54         | -2.92         | 30.67             | 8.54              |
| 15  | 107 | 73 | -6.54         | 0.08          | 42.75             | 0.01              |
| 16  | 102 | 70 | -11.54        | -2.92         | 133.14            | 8.54              |
| 17  | 125 | 74 | 11.46         | 1.08          | 131.37            | 1.16              |
| 18  | 112 | 72 | -1.54         | -0.92         | 2.37              | 0.85              |
| 19  | 106 | 72 | -7.54         | -0.92         | 56.83             | 0.85              |
| 20  | 78  | 70 | -35.54        | -2.92         | 1262.98           | 8.54              |
| 21  | 113 | 78 | -0.54         | 5.08          | 0.29              | 25.78             |
| 22  | 120 | 76 | 6.46          | 3.08          | 41.75             | 9.47              |
| 23  | 125 | 75 | 11.46         | 2.08          | 131.37            | 4.31              |
| 24  | 126 | 76 | 12.46         | 3.08          | 155.29            | 9.47              |
| 25  | 116 | 70 | 2.46          | -2.92         | 6.06              | 8.54              |
| 26  | 108 | 75 | -5.54         | 2.08          | 30.67             | 4.31              |
| 27  | 106 | 65 | -7.54         | -7.92         | 56.83             | 62.78             |
| 28  | 102 | 68 | -11.54        | -4.92         | 133.14            | 24.24             |
| 29  | 117 | 75 | 3.46          | 2.08          | 11.98             | 4.31              |
| 30  | 113 | 75 | -0.54         | 2.08          | 0.29              | 4.31              |
| 31  | 110 | 73 | -3.54         | 0.08          | 12.52             | 0.01              |
| 32  | 107 | 68 | -6.54         | -4.92         | 42.75             | 24.24             |
| 33  | 108 | 70 | -5.54         | -2.92         | 30.67             | 8.54              |
| 34  | 108 | 71 | -5.54         | -1.92         | 30.67             | 3.70              |
| 35  | 109 | 72 | -4.54         | -0.92         | 20.60             | 0.85              |
| 36  | 102 | 77 | -11.54        | 4.08          | 133.14            | 16.62             |
| 37  | 105 | 75 | -8.54         | 2.08          | 72.91             | 4.31              |
| 38  | 105 | 70 | -8.54         | -2.92         | 72.91             | 8.54              |
| 39  | 115 | 76 | 1.46          | 3.08          | 2.14              | 9.47              |
| 40  | 110 | 73 | -3.54         | 0.08          | 12.52             | 0.01              |
| 41  | 110 | 73 | -3.54         | 0.08          | 12.52             | 0.01              |
| 42  | 95  | 74 | -18.54        | 1.08          | 343.67            | 1.16              |
| 43  | 97  | 65 | -16.54        | -7.92         | 273.52            | 62.78             |
| 44  | 110 | 74 | -3.54         | 1.08          | 12.52             | 1.16              |
| 45  | 122 | 75 | 8.46          | 2.08          | 71.60             | 4.31              |

|           |             |             |              |             |                 |               |
|-----------|-------------|-------------|--------------|-------------|-----------------|---------------|
| <b>46</b> | 113         | 74          | -0.54        | 1.08        | 0.29            | 1.16          |
| <b>47</b> | 105         | 74          | -8.54        | 1.08        | 72.91           | 1.16          |
| <b>48</b> | 114         | 74          | 0.46         | 1.08        | 0.21            | 1.16          |
| <b>49</b> | 114         | 72          | 0.46         | -0.92       | 0.21            | 0.85          |
| <b>50</b> | 113         | 74          | -0.54        | 1.08        | 0.29            | 1.16          |
| <b>51</b> | 98          | 66          | -15.54       | -6.92       | 241.44          | 47.93         |
| <b>52</b> | 117         | 71          | 3.46         | -1.92       | 11.98           | 3.70          |
| <b>53</b> | 124         | 72          | 10.46        | -0.92       | 109.44          | 0.85          |
| <b>54</b> | 121         | 72          | 7.46         | -0.92       | 55.67           | 0.85          |
| <b>55</b> | 129         | 80          | 15.46        | 7.08        | 239.06          | 50.08         |
| <b>56</b> | 103         | 74          | -10.54       | 1.08        | 111.06          | 1.16          |
| <b>57</b> | 116         | 73          | 2.46         | 0.08        | 6.06            | 0.01          |
| <b>58</b> | 120         | 75          | 6.46         | 2.08        | 41.75           | 4.31          |
| <b>59</b> | 136         | 82          | 22.46        | 9.08        | 504.52          | 82.39         |
| <b>60</b> | 136         | 79          | 22.46        | 6.08        | 504.52          | 36.93         |
| <b>61</b> | 133         | 72          | 19.46        | -0.92       | 378.75          | 0.85          |
| <b>62</b> | 124         | 75          | 10.46        | 2.08        | 109.44          | 4.31          |
| <b>63</b> | 109         | 74          | -4.54        | 1.08        | 20.60           | 1.16          |
| <b>64</b> | 119         | 74          | 5.46         | 1.08        | 29.83           | 1.16          |
| <b>65</b> | 111         | 71          | -2.54        | -1.92       | 6.44            | 3.70          |
| <b>66</b> | 125         | 75          | 11.46        | 2.08        | 131.37          | 4.31          |
| <b>67</b> | 112         | 78          | -1.54        | 5.08        | 2.37            | 25.78         |
| <b>68</b> | 110         | 71          | -3.54        | -1.92       | 12.52           | 3.70          |
| <b>69</b> | 127         | 74          | 13.46        | 1.08        | 181.21          | 1.16          |
| <b>70</b> | 105         | 70          | -8.54        | -2.92       | 72.91           | 8.54          |
| <b>71</b> | 120         | 70          | 6.46         | -2.92       | 41.75           | 8.54          |
| <b>72</b> | 119         | 70          | 5.46         | -2.92       | 29.83           | 8.54          |
| <b>73</b> | 121         | 71          | 7.46         | -1.92       | 55.67           | 3.70          |
| <b>74</b> | 121         | 70          | 7.46         | -2.92       | 55.67           | 8.54          |
| <b>75</b> | 127         | 76          | 13.46        | 3.08        | 181.21          | 9.47          |
| <b>76</b> | 131         | 74          | 17.46        | 1.08        | 304.91          | 1.16          |
| <b>77</b> | 123         | 73          | 9.46         | 0.08        | 89.52           | 0.01          |
| <b>78</b> | 129         | 78          | 15.46        | 5.08        | 239.06          | 25.78         |
| <b>∑</b>  | <b>8856</b> | <b>5688</b> | <b>36.54</b> | <b>0.00</b> | <b>11756.48</b> | <b>891.54</b> |

### Proses Perhitungan Menggambar Grafik Histogram Variabel X (Minat Berwirausaha)

- Menentukan Rentang = Data terbesar - Data terkecil  
= 136 - 68  
= 68
- Menentukan Banyak Kelas =  $1 + 3,3 \log n$   
=  $1 + 3,3 \log 78$   
=  $1 + 3,3 (1,89)$   
=  $1 + 6,24$   
= 7,24
- Menentukan Panjang Kelas Interval =  $\frac{\text{Rentang}}{\text{Banyak Kelas}} = \frac{68,0}{7,0} = 10,00$
- Membuat Tabel Distribusi Frekuensi

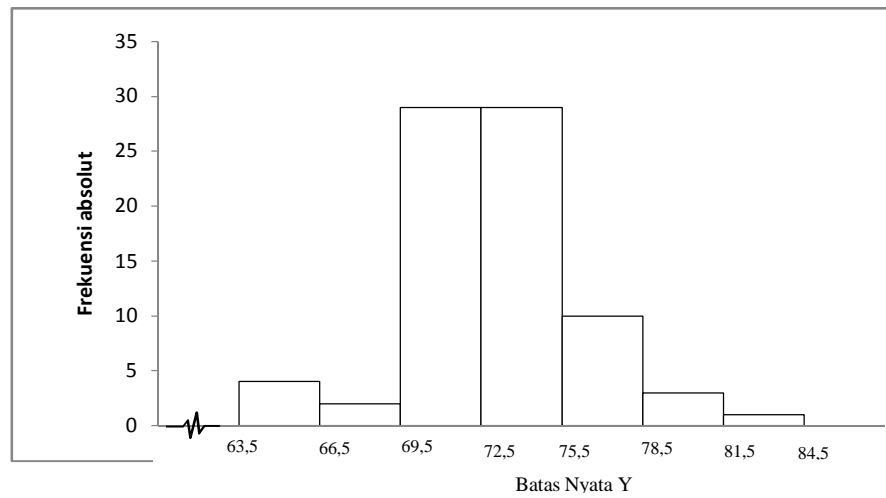
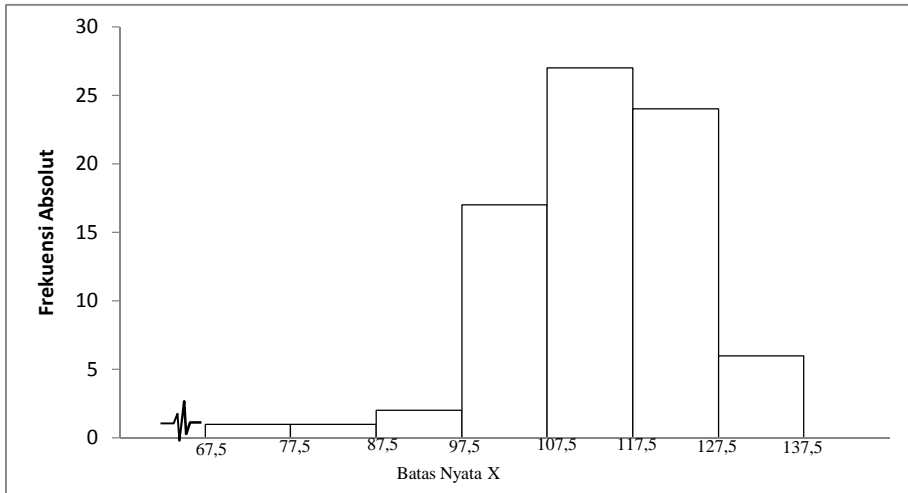
| No.           | Kelas Interval | Frek. Absolut | Frek. Relatif | Batas Bawah | Batas Atas |
|---------------|----------------|---------------|---------------|-------------|------------|
| 1             | 68-77          | 1             | 1%            | 67,5        | 77,5       |
| 2             | 78-87          | 1             | 1%            | 77,5        | 87,5       |
| 3             | 88-97          | 2             | 3%            | 87,5        | 97,5       |
| 4             | 98-107         | 17            | 22%           | 97,5        | 107,5      |
| 5             | 108-117        | 27            | 35%           | 107,5       | 117,5      |
| 6             | 118-127        | 24            | 31%           | 117,5       | 127,5      |
| 7             | 128-137        | 6             | 8%            | 127,5       | 137,5      |
| <b>Jumlah</b> |                | <b>78</b>     | <b>100%</b>   |             |            |

### Proses Perhitungan Menggambar Grafik Histogram Variabel Y (Hasil Belajar)

- Menentukan Rentang = Data terbesar - Data Terkecil  
= 82 - 64  
= 18
- Menentukan Banyak Kelas =  $1 + 3,3 \log n$   
=  $1 + 3,3 \log 78$   
=  $1 + 3,3 (1,89)$   
=  $1 + 6,24$   
= 7,24
- Menentukan Panjang Kelas Interval =  $\frac{\text{Rentang}}{\text{Banyak Kelas}} = \frac{18,0}{7,0} = 3$
- Membuat Tabel Distribusi Frekuensi

| No.           | Kelas Interval | Frek. Absolut | Frek. Relatif | Batas Bawah | Batas Atas |
|---------------|----------------|---------------|---------------|-------------|------------|
| 1             | 64-66          | 4             | 5%            | 63,5        | 66,5       |
| 2             | 67-69          | 2             | 3%            | 66,5        | 69,5       |
| 3             | 70-72          | 29            | 37%           | 69,5        | 72,5       |
| 4             | 73-75          | 29            | 37%           | 72,5        | 75,5       |
| 5             | 76-78          | 10            | 13%           | 75,5        | 78,5       |
| 6             | 79-81          | 3             | 4%            | 78,5        | 81,5       |
| 7             | 82-84          | 1             | 1%            | 81,5        | 84,5       |
| <b>Jumlah</b> |                | <b>78</b>     | <b>100%</b>   |             |            |

**GRAFIK HISTOGRAM VARIABEL X (KINERJA PENGURUS)**

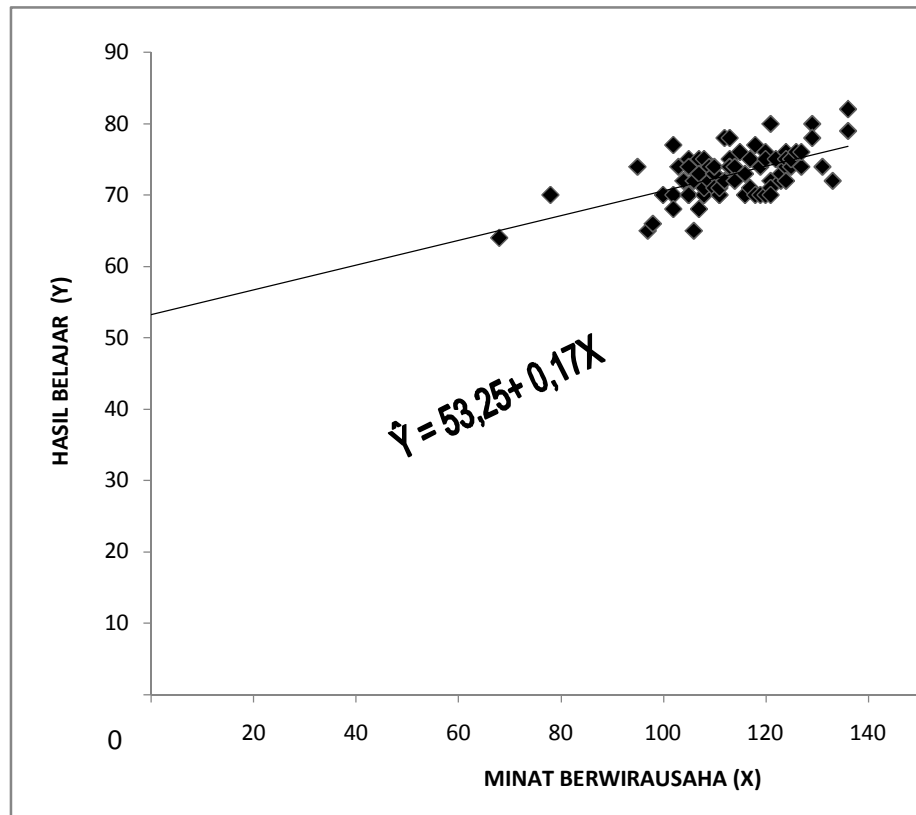


**Tabel Untuk Menghitung  $\hat{Y} = a + bX$** 

| <b>n</b> | <b>X</b> | <b><math>\hat{Y} = 61,67 + 0,385X</math></b> |   |             | <b><math>\hat{Y}</math></b> |
|----------|----------|--|---|-------------|-----------------------------|
| 1        | 68       | 53.25  | + | 0.173 . 68  | 65.033                      |
| 2        | 78       | 53.25  | + | 0.173 . 78  | 66.765                      |
| 3        | 95       | 53.25  | + | 0.173 . 95  | 69.711                      |
| 4        | 97       | 53.25  | + | 0.173 . 97  | 70.057                      |
| 5        | 98       | 53.25  | + | 0.173 . 98  | 70.231                      |
| 6        | 100      | 53.25  | + | 0.173 . 100 | 70.577                      |
| 7        | 102      | 53.25  | + | 0.173 . 102 | 70.924                      |
| 8        | 102      | 53.25  | + | 0.173 . 102 | 70.924                      |
| 9        | 102      | 53.25  | + | 0.173 . 102 | 70.924                      |
| 10       | 103      | 53.25  | + | 0.173 . 103 | 71.097                      |
| 11       | 104      | 53.25  | + | 0.173 . 104 | 71.270                      |
| 12       | 105      | 53.25  | + | 0.173 . 105 | 71.444                      |
| 13       | 105      | 53.25  | + | 0.173 . 105 | 71.444                      |
| 14       | 105      | 53.25  | + | 0.173 . 105 | 71.444                      |
| 15       | 105      | 53.25  | + | 0.173 . 105 | 71.444                      |
| 16       | 105      | 53.25  | + | 0.173 . 105 | 71.444                      |
| 17       | 106      | 53.25  | + | 0.173 . 106 | 71.617                      |
| 18       | 106      | 53.25  | + | 0.173 . 106 | 71.617                      |
| 19       | 107      | 53.25  | + | 0.173 . 107 | 71.790                      |
| 20       | 107      | 53.25  | + | 0.173 . 107 | 71.790                      |
| 21       | 107      | 53.25  | + | 0.173 . 107 | 71.790                      |
| 22       | 108      | 53.25  | + | 0.173 . 108 | 71.963                      |
| 23       | 108      | 53.25  | + | 0.173 . 108 | 71.963                      |
| 24       | 108      | 53.25  | + | 0.173 . 108 | 71.963                      |
| 25       | 108      | 53.25  | + | 0.173 . 108 | 71.963                      |
| 26       | 109      | 53.25  | + | 0.173 . 109 | 72.137                      |
| 27       | 109      | 53.25  | + | 0.173 . 109 | 72.137                      |
| 28       | 110      | 53.25  | + | 0.173 . 110 | 72.310                      |
| 29       | 110      | 53.25  | + | 0.173 . 110 | 72.310                      |
| 30       | 110      | 53.25  | + | 0.173 . 110 | 72.310                      |
| 31       | 110      | 53.25  | + | 0.173 . 110 | 72.310                      |
| 32       | 110      | 53.25  | + | 0.173 . 110 | 72.310                      |
| 33       | 111      | 53.25  | + | 0.173 . 111 | 72.483                      |
| 34       | 111      | 53.25  | + | 0.173 . 111 | 72.483                      |
| 35       | 111      | 53.25  | + | 0.173 . 111 | 72.483                      |
| 36       | 112      | 53.25  | + | 0.173 . 112 | 72.657                      |
| 37       | 112      | 53.25  | + | 0.173 . 112 | 72.657                      |
| 38       | 113      | 53.25  | + | 0.173 . 113 | 72.830                      |
| 39       | 113      | 53.25  | + | 0.173 . 113 | 72.830                      |
| 40       | 113      | 53.25  | + | 0.173 . 113 | 72.830                      |
| 41       | 113      | 53.25  | + | 0.173 . 113 | 72.830                      |
| 42       | 114      | 53.25  | + | 0.173 . 114 | 73.003                      |
| 43       | 114      | 53.25  | + | 0.173 . 114 | 73.003                      |
| 44       | 115      | 53.25  | + | 0.173 . 115 | 73.176                      |
| 45       | 116      | 53.25  | + | 0.173 . 116 | 73.350                      |



|           |     |       |   |       |       |        |
|-----------|-----|-------|---|-------|-------|--------|
| <b>46</b> | 116 | 53.25 | + | 0.173 | . 116 | 73.350 |
| <b>47</b> | 117 | 53.25 | + | 0.173 | . 117 | 73.523 |
| <b>48</b> | 117 | 53.25 | + | 0.173 | . 117 | 73.523 |
| <b>49</b> | 118 | 53.25 | + | 0.173 | . 118 | 73.696 |
| <b>50</b> | 118 | 53.25 | + | 0.173 | . 118 | 73.696 |
| <b>51</b> | 119 | 53.25 | + | 0.173 | . 119 | 73.869 |
| <b>52</b> | 119 | 53.25 | + | 0.173 | . 119 | 73.869 |
| <b>53</b> | 120 | 53.25 | + | 0.173 | . 120 | 74.043 |
| <b>54</b> | 120 | 53.25 | + | 0.173 | . 120 | 74.043 |
| <b>55</b> | 120 | 53.25 | + | 0.173 | . 120 | 74.043 |
| <b>56</b> | 121 | 53.25 | + | 0.173 | . 121 | 74.216 |
| <b>57</b> | 121 | 53.25 | + | 0.173 | . 121 | 74.216 |
| <b>58</b> | 121 | 53.25 | + | 0.173 | . 121 | 74.216 |
| <b>59</b> | 121 | 53.25 | + | 0.173 | . 121 | 74.216 |
| <b>60</b> | 122 | 53.25 | + | 0.173 | . 122 | 74.389 |
| <b>61</b> | 123 | 53.25 | + | 0.173 | . 123 | 74.562 |
| <b>62</b> | 123 | 53.25 | + | 0.173 | . 123 | 74.562 |
| <b>63</b> | 124 | 53.25 | + | 0.173 | . 124 | 74.736 |
| <b>64</b> | 124 | 53.25 | + | 0.173 | . 124 | 74.736 |
| <b>65</b> | 124 | 53.25 | + | 0.173 | . 124 | 74.736 |
| <b>66</b> | 124 | 53.25 | + | 0.173 | . 124 | 74.736 |
| <b>67</b> | 125 | 53.25 | + | 0.173 | . 125 | 74.909 |
| <b>68</b> | 125 | 53.25 | + | 0.173 | . 125 | 74.909 |
| <b>69</b> | 125 | 53.25 | + | 0.173 | . 125 | 74.909 |
| <b>70</b> | 126 | 53.25 | + | 0.173 | . 126 | 75.082 |
| <b>71</b> | 127 | 53.25 | + | 0.173 | . 127 | 75.256 |
| <b>72</b> | 127 | 53.25 | + | 0.173 | . 127 | 75.256 |
| <b>73</b> | 129 | 53.25 | + | 0.173 | . 129 | 75.602 |
| <b>74</b> | 129 | 53.25 | + | 0.173 | . 129 | 75.602 |
| <b>75</b> | 131 | 53.25 | + | 0.173 | . 131 | 75.949 |
| <b>76</b> | 133 | 53.25 | + | 0.173 | . 133 | 76.295 |
| <b>77</b> | 136 | 53.25 | + | 0.173 | . 136 | 76.815 |
| <b>78</b> | 136 | 53.25 | + | 0.173 | . 136 | 76.815 |

**GRAFIK PERSAMAAN REGRESI**



Tabel Perhitungan Rata-rata, Varians dan Simpangan Bak

Regresi  $\hat{Y} = 61,67 + 0,385X$

| No. | X   | Y  | $\hat{Y}$ | $(Y - \hat{Y})$ | $(Y - \hat{Y}) - (Y - \hat{Y})$ | $[(Y - \hat{Y}) - (Y - \hat{Y})]$ |
|-----|-----|----|-----------|-----------------|---------------------------------|-----------------------------------|
| 1   | 68  | 64 | 65.03     | -1.0326         | -1.0326                         | 1.0663                            |
| 2   | 78  | 70 | 66.77     | 3.2347          | 3.2347                          | 10.4632                           |
| 3   | 95  | 74 | 69.71     | 4.2891          | 4.2891                          | 18.3963                           |
| 4   | 97  | 65 | 70.06     | -5.0575         | -5.0575                         | 25.5778                           |
| 5   | 98  | 66 | 70.23     | -4.2307         | -4.2307                         | 17.8990                           |
| 6   | 100 | 70 | 70.58     | -0.5773         | -0.5773                         | 0.3332                            |
| 7   | 102 | 70 | 70.92     | -0.9238         | -0.9238                         | 0.8534                            |
| 8   | 102 | 68 | 70.92     | -2.9238         | -2.9238                         | 8.5486                            |
| 9   | 102 | 77 | 70.92     | 6.0762          | 6.0762                          | 36.9202                           |
| 10  | 103 | 74 | 71.10     | 2.9029          | 2.9029                          | 8.4270                            |
| 11  | 104 | 72 | 71.27     | 0.7297          | 0.7297                          | 0.5324                            |
| 12  | 105 | 70 | 71.44     | -1.4436         | -1.4436                         | 2.0840                            |
| 13  | 105 | 75 | 71.44     | 3.5564          | 3.5564                          | 12.6479                           |
| 14  | 105 | 70 | 71.44     | -1.4436         | -1.4436                         | 2.0840                            |
| 15  | 105 | 74 | 71.44     | 2.5564          | 2.5564                          | 6.5351                            |
| 16  | 105 | 70 | 71.44     | -1.4436         | -1.4436                         | 2.0840                            |
| 17  | 106 | 72 | 71.62     | 0.3831          | 0.3831                          | 0.1468                            |
| 18  | 106 | 65 | 71.62     | -6.6169         | -6.6169                         | 43.7832                           |
| 19  | 107 | 75 | 71.79     | 3.2098          | 3.2098                          | 10.3031                           |
| 20  | 107 | 73 | 71.79     | 1.2098          | 1.2098                          | 1.4637                            |
| 21  | 107 | 68 | 71.79     | -3.7902         | -3.7902                         | 14.3653                           |
| 22  | 108 | 70 | 71.96     | -1.9634         | -1.9634                         | 3.8550                            |
| 23  | 108 | 75 | 71.96     | 3.0366          | 3.0366                          | 9.2208                            |
| 24  | 108 | 70 | 71.96     | -1.9634         | -1.9634                         | 3.8550                            |
| 25  | 108 | 71 | 71.96     | -0.9634         | -0.9634                         | 0.9282                            |
| 26  | 109 | 72 | 72.14     | -0.1367         | -0.1367                         | 0.0187                            |
| 27  | 109 | 74 | 72.14     | 1.8633          | 1.8633                          | 3.4719                            |
| 28  | 110 | 73 | 72.31     | 0.6900          | 0.6900                          | 0.4761                            |
| 29  | 110 | 73 | 72.31     | 0.6900          | 0.6900                          | 0.4761                            |
| 30  | 110 | 73 | 72.31     | 0.6900          | 0.6900                          | 0.4761                            |
| 31  | 110 | 74 | 72.31     | 1.6900          | 1.6900                          | 2.8562                            |
| 32  | 110 | 71 | 72.31     | -1.3100         | -1.3100                         | 1.7160                            |
| 33  | 111 | 70 | 72.48     | -2.4832         | -2.4832                         | 6.1665                            |
| 34  | 111 | 70 | 72.48     | -2.4832         | -2.4832                         | 6.1665                            |
| 35  | 111 | 71 | 72.48     | -1.4832         | -1.4832                         | 2.2000                            |
| 36  | 112 | 72 | 72.66     | -0.6565         | -0.6565                         | 0.4310                            |
| 37  | 112 | 78 | 72.66     | 5.3435          | 5.3435                          | 28.5529                           |
| 38  | 113 | 78 | 72.83     | 5.1702          | 5.1702                          | 26.7312                           |
| 39  | 113 | 75 | 72.83     | 2.1702          | 2.1702                          | 4.7099                            |
| 40  | 113 | 74 | 72.83     | 1.1702          | 1.1702                          | 1.3694                            |
| 41  | 113 | 74 | 72.83     | 1.1702          | 1.1702                          | 1.3694                            |
| 42  | 114 | 74 | 73.00     | 0.9970          | 0.9970                          | 0.9939                            |
| 43  | 114 | 72 | 73.00     | -1.0030         | -1.0030                         | 1.0061                            |
| 44  | 115 | 76 | 73.18     | 2.8237          | 2.8237                          | 7.9732                            |
| 45  | 116 | 70 | 73.35     | -3.3496         | -3.3496                         | 11.2197                           |
| 46  | 116 | 73 | 73.35     | -0.3496         | -0.3496                         | 0.1222                            |

|               |             |             |       |             |         |               |
|---------------|-------------|-------------|-------|-------------|---------|---------------|
| <b>47</b>     | 117         | 75          | 73.52 | 1.4771      | 1.4771  | 2.1819        |
| <b>48</b>     | 117         | 71          | 73.52 | -2.5229     | -2.5229 | 6.3648        |
| <b>49</b>     | 118         | 70          | 73.70 | -3.6961     | -3.6961 | 13.6614       |
| <b>50</b>     | 118         | 77          | 73.70 | 3.3039      | 3.3039  | 10.9156       |
| <b>51</b>     | 119         | 74          | 73.87 | 0.1306      | 0.1306  | 0.0171        |
| <b>52</b>     | 119         | 70          | 73.87 | -3.8694     | -3.8694 | 14.9723       |
| <b>53</b>     | 120         | 76          | 74.04 | 1.9573      | 1.9573  | 3.8311        |
| <b>54</b>     | 120         | 75          | 74.04 | 0.9573      | 0.9573  | 0.9165        |
| <b>55</b>     | 120         | 70          | 74.04 | -4.0427     | -4.0427 | 16.3432       |
| <b>56</b>     | 121         | 80          | 74.22 | 5.7841      | 5.7841  | 33.4553       |
| <b>57</b>     | 121         | 72          | 74.22 | -2.2159     | -2.2159 | 4.9104        |
| <b>58</b>     | 121         | 71          | 74.22 | -3.2159     | -3.2159 | 10.3423       |
| <b>59</b>     | 121         | 70          | 74.22 | -4.2159     | -4.2159 | 17.7742       |
| <b>60</b>     | 122         | 75          | 74.39 | 0.6108      | 0.6108  | 0.3731        |
| <b>61</b>     | 123         | 72          | 74.56 | -2.5625     | -2.5625 | 6.5663        |
| <b>62</b>     | 123         | 73          | 74.56 | -1.5625     | -1.5625 | 2.4413        |
| <b>63</b>     | 124         | 76          | 74.74 | 1.2642      | 1.2642  | 1.5983        |
| <b>64</b>     | 124         | 74          | 74.74 | -0.7358     | -0.7358 | 0.5413        |
| <b>65</b>     | 124         | 72          | 74.74 | -2.7358     | -2.7358 | 7.4843        |
| <b>66</b>     | 124         | 75          | 74.74 | 0.2642      | 0.2642  | 0.0698        |
| <b>67</b>     | 125         | 74          | 74.91 | -0.9090     | -0.9090 | 0.8263        |
| <b>68</b>     | 125         | 75          | 74.91 | 0.0910      | 0.0910  | 0.0083        |
| <b>69</b>     | 125         | 75          | 74.91 | 0.0910      | 0.0910  | 0.0083        |
| <b>70</b>     | 126         | 76          | 75.08 | 0.9177      | 0.9177  | 0.8422        |
| <b>71</b>     | 127         | 74          | 75.26 | -1.2556     | -1.2556 | 1.5764        |
| <b>72</b>     | 127         | 76          | 75.26 | 0.7444      | 0.7444  | 0.5542        |
| <b>73</b>     | 129         | 80          | 75.60 | 4.3979      | 4.3979  | 19.3415       |
| <b>74</b>     | 129         | 78          | 75.60 | 2.3979      | 2.3979  | 5.7499        |
| <b>75</b>     | 131         | 74          | 75.95 | -1.9486     | -1.9486 | 3.7972        |
| <b>76</b>     | 133         | 72          | 76.30 | -4.2952     | -4.2952 | 18.4486       |
| <b>77</b>     | 136         | 82          | 76.81 | 5.1850      | 5.1850  | 26.8843       |
| <b>78</b>     | 136         | 79          | 76.81 | 2.1850      | 2.1850  | 4.7742        |
| <b>Jumlah</b> | <b>8856</b> | <b>5688</b> |       | <b>0.00</b> |         | <b>588.45</b> |
| 0.0000        |             |             |       |             |         |               |

**Tabel Nilai-nilai r Product Moment dari Pearson**

| N  | Taraf Signifikan |       | N  | Taraf Signifikan |       | N    | Taraf Signifikan |       |
|----|------------------|-------|----|------------------|-------|------|------------------|-------|
|    | 5%               | 1%    |    | 5%               | 1%    |      | 5%               | 1%    |
| 3  | 0.997            | 0.999 | 26 | 0.388            | 0.496 | 55   | 0.266            | 0.345 |
| 4  | 0.950            | 0.990 | 27 | 0.381            | 0.487 | 60   | 0.254            | 0.330 |
| 5  | 0.878            | 0.959 | 28 | 0.374            | 0.478 | 65   | 0.244            | 0.317 |
| 6  | 0.811            | 0.917 | 29 | 0.367            | 0.470 | 70   | 0.235            | 0.306 |
| 7  | 0.754            | 0.874 | 30 | 0.361            | 0.463 | 75   | 0.227            | 0.296 |
| 8  | 0.707            | 0.834 | 31 | 0.355            | 0.456 | 80   | 0.220            | 0.286 |
| 9  | 0.666            | 0.798 | 32 | 0.349            | 0.449 | 85   | 0.213            | 0.278 |
| 10 | 0.632            | 0.765 | 33 | 0.344            | 0.442 | 90   | 0.207            | 0.270 |
| 11 | 0.602            | 0.735 | 34 | 0.339            | 0.436 | 95   | 0.202            | 0.263 |
| 12 | 0.576            | 0.708 | 35 | 0.334            | 0.430 | 100  | 0.194            | 0.256 |
| 13 | 0.553            | 0.684 | 36 | 0.329            | 0.424 | 125  | 0.176            | 0.230 |
| 14 | 0.532            | 0.661 | 37 | 0.325            | 0.418 | 150  | 0.159            | 0.210 |
| 15 | 0.514            | 0.641 | 38 | 0.320            | 0.413 | 175  | 0.148            | 0.194 |
| 16 | 0.497            | 0.623 | 39 | 0.316            | 0.408 | 200  | 0.138            | 0.181 |
| 17 | 0.482            | 0.606 | 40 | 0.312            | 0.403 | 300  | 0.113            | 0.148 |
| 18 | 0.463            | 0.590 | 41 | 0.308            | 0.398 | 400  | 0.098            | 0.128 |
| 19 | 0.456            | 0.575 | 42 | 0.304            | 0.393 | 500  | 0.088            | 0.115 |
| 20 | 0.444            | 0.561 | 43 | 0.301            | 0.389 | 600  | 0.080            | 0.105 |
| 21 | 0.433            | 0.549 | 44 | 0.297            | 0.384 | 700  | 0.074            | 0.097 |
| 22 | 0.423            | 0.537 | 45 | 0.294            | 0.380 | 800  | 0.070            | 0.091 |
| 23 | 0.413            | 0.526 | 46 | 0.291            | 0.376 | 900  | 0.065            | 0.086 |
| 24 | 0.404            | 0.515 | 47 | 0.288            | 0.372 | 1000 | 0.062            | 0.081 |
| 25 | 0.396            | 0.505 | 48 | 0.284            | 0.368 |      |                  |       |
|    |                  |       | 49 | 0.281            | 0.364 |      |                  |       |
|    |                  |       | 50 | 0.279            | 0.361 |      |                  |       |

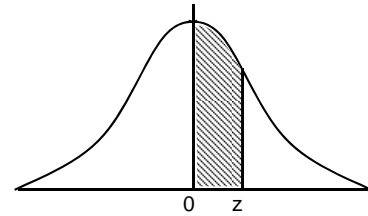
Sumber : Conover, W.J., *Practical Nonparametric Statistics*, John Wiley & Sons, Inc., 1973

### Nilai Kritis L untuk Uji Lilliefors

| Ukuran Sampel | Taraf Nyata ( $\alpha$ ) |                          |                          |                          |                          |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|               | 0.01                     | 0.05                     | 0.10                     | 0.15                     | 0.20                     |
| n = 4         | 0.417                    | 0.381                    | 0.352                    | 0.319                    | 0.300                    |
| 5             | 0.405                    | 0.337                    | 0.315                    | 0.299                    | 0.285                    |
| 6             | 0.364                    | 0.319                    | 0.294                    | 0.277                    | 0.265                    |
| 7             | 0.348                    | 0.300                    | 0.276                    | 0.258                    | 0.247                    |
| 8             | 0.331                    | 0.285                    | 0.261                    | 0.244                    | 0.233                    |
| 9             | 0.311                    | 0.271                    | 0.249                    | 0.233                    | 0.223                    |
| 10            | 0.294                    | 0.258                    | 0.239                    | 0.224                    | 0.215                    |
| 11            | 0.284                    | 0.249                    | 0.230                    | 0.217                    | 0.206                    |
| 12            | 0.275                    | 0.242                    | 0.223                    | 0.212                    | 0.199                    |
| 13            | 0.268                    | 0.234                    | 0.214                    | 0.202                    | 0.190                    |
| 14            | 0.261                    | 0.227                    | 0.207                    | 0.194                    | 0.183                    |
| 15            | 0.257                    | 0.220                    | 0.201                    | 0.187                    | 0.177                    |
| 16            | 0.250                    | 0.213                    | 0.195                    | 0.182                    | 0.173                    |
| 17            | 0.245                    | 0.206                    | 0.189                    | 0.177                    | 0.169                    |
| 18            | 0.239                    | 0.200                    | 0.184                    | 0.173                    | 0.166                    |
| 19            | 0.235                    | 0.195                    | 0.179                    | 0.169                    | 0.163                    |
| 20            | 0.231                    | 0.190                    | 0.174                    | 0.166                    | 0.160                    |
| 25            | 0.200                    | 0.173                    | 0.158                    | 0.147                    | 0.142                    |
| 30            | 0.187                    | 0.161                    | 0.144                    | 0.136                    | 0.131                    |
| n > 30        | $\frac{1.031}{\sqrt{n}}$ | $\frac{0.886}{\sqrt{n}}$ | $\frac{0.805}{\sqrt{n}}$ | $\frac{0.768}{\sqrt{n}}$ | $\frac{0.736}{\sqrt{n}}$ |

Sumber : Metode Penelitian Bisnis karangan Sugiyono, Penerbit alfabeta, 2007

**Tabel Kurva Normal Persentase**  
**Daerah Kurva Normal**  
**dari 0 sampai z**

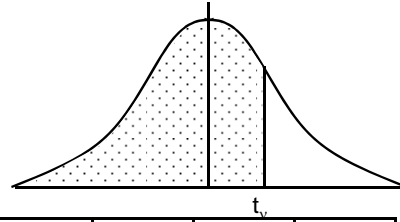


| Z   | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|-----|------|------|------|------|------|------|------|------|------|------|
| 0.0 | 0000 | 0040 | 0080 | 0120 | 0160 | 0199 | 0239 | 0279 | 0319 | 0359 |
| 0.1 | 0398 | 0438 | 0478 | 0517 | 0557 | 0596 | 0636 | 0675 | 0714 | 0753 |
| 0.2 | 0793 | 0832 | 0871 | 0910 | 0948 | 0987 | 1026 | 1064 | 1103 | 1141 |
| 0.3 | 1179 | 1217 | 1255 | 1293 | 1331 | 1368 | 1406 | 1443 | 1480 | 1517 |
| 0.4 | 1554 | 1591 | 1628 | 1664 | 1700 | 1736 | 1772 | 1808 | 1844 | 1879 |
| 0.5 | 1915 | 1950 | 1985 | 2019 | 2054 | 2088 | 2123 | 2157 | 2190 | 2224 |
| 0.6 | 2258 | 2291 | 2324 | 2357 | 2389 | 2422 | 2454 | 2486 | 2518 | 2549 |
| 0.7 | 2580 | 2612 | 2642 | 2673 | 2704 | 2734 | 2764 | 2794 | 2823 | 2852 |
| 0.8 | 2881 | 2910 | 2939 | 2967 | 2996 | 3023 | 3051 | 3078 | 3106 | 3133 |
| 0.9 | 3159 | 3186 | 3212 | 3238 | 3264 | 3289 | 3315 | 3340 | 3365 | 3389 |
| 1.0 | 3413 | 3438 | 3461 | 3485 | 3508 | 3531 | 3554 | 3577 | 3599 | 3621 |
| 1.1 | 3643 | 3665 | 3686 | 3708 | 3729 | 3749 | 3770 | 3790 | 3810 | 3830 |
| 1.2 | 3849 | 3869 | 3888 | 3907 | 3925 | 3944 | 3962 | 3980 | 3997 | 4015 |
| 1.3 | 4032 | 4049 | 4066 | 4082 | 4099 | 4115 | 4131 | 4147 | 4162 | 4177 |
| 1.4 | 4192 | 4207 | 4222 | 4236 | 4251 | 4265 | 4279 | 4292 | 4306 | 4319 |
| 1.5 | 4332 | 4345 | 4357 | 4370 | 4382 | 4394 | 4406 | 4418 | 4429 | 4441 |
| 1.6 | 4452 | 4463 | 4474 | 4484 | 4495 | 4505 | 4515 | 4525 | 4535 | 4545 |
| 1.7 | 4554 | 4564 | 4573 | 4582 | 4591 | 4599 | 4608 | 4616 | 4625 | 4633 |
| 1.8 | 4641 | 4649 | 4656 | 4664 | 4671 | 4678 | 4688 | 4693 | 4699 | 4706 |
| 1.9 | 4713 | 4719 | 4726 | 4732 | 4738 | 4744 | 4750 | 4756 | 4761 | 4767 |
| 2.0 | 4772 | 4778 | 4783 | 4788 | 4793 | 4798 | 4803 | 4808 | 4812 | 4817 |
| 2.1 | 4821 | 4826 | 4830 | 4834 | 4838 | 4842 | 4846 | 4850 | 4854 | 4857 |
| 2.2 | 4861 | 4864 | 4868 | 4871 | 4875 | 4878 | 4881 | 4884 | 4887 | 4899 |
| 2.3 | 4893 | 4896 | 4898 | 4901 | 4904 | 4906 | 4909 | 4911 | 4913 | 4936 |
| 2.4 | 4918 | 4920 | 4922 | 4925 | 4927 | 4929 | 4931 | 4932 | 4934 | 4936 |
| 2.5 | 4938 | 4940 | 4941 | 4943 | 4945 | 4946 | 4948 | 4949 | 4951 | 4952 |
| 2.6 | 4953 | 4955 | 4956 | 4957 | 4959 | 4960 | 4961 | 4962 | 4963 | 4964 |
| 2.7 | 4965 | 4956 | 4967 | 4968 | 4969 | 4970 | 4971 | 4972 | 4973 | 4974 |
| 2.8 | 4974 | 4975 | 4976 | 4977 | 4977 | 4978 | 4979 | 4979 | 4980 | 4981 |
| 2.9 | 4981 | 4382 | 4982 | 4983 | 4984 | 4984 | 4985 | 4985 | 4986 | 4986 |
| 3.0 | 4987 | 4987 | 4987 | 4988 | 4988 | 4989 | 4989 | 4989 | 4990 | 4990 |
| 3.1 | 4990 | 4991 | 4991 | 4991 | 4992 | 4992 | 4992 | 4992 | 4993 | 4993 |
| 3.2 | 4993 | 4993 | 4994 | 4994 | 4994 | 4994 | 4994 | 4995 | 4995 | 4995 |
| 3.3 | 4995 | 4995 | 4995 | 4996 | 4996 | 4996 | 4996 | 4996 | 4996 | 4997 |
| 3.4 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4998 |
| 3.5 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 |
| 3.6 | 4998 | 4998 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3.7 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3.8 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3.9 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |

Sumber : Theory and Problems of Statistics, Spiegel, M.R., Ph.D., Schoum Publishing Co., New York, 1961



**Nilai Persentil untuk Distribusi t**  
**v = dk**  
**(Bilangan Dalam Badan Daftar Menyatakan  $t_p$ )**

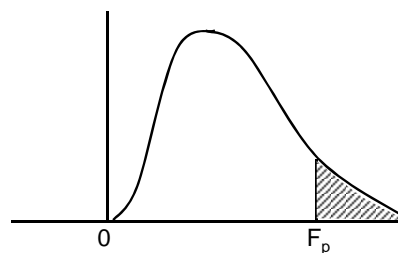


| v        | $t_{0,995}$ | $t_{0,99}$ | $t_{0,975}$ | $t_{0,95}$ | $t_{0,90}$ | $t_{0,80}$ | $t_{0,75}$ | $t_{0,70}$ | $t_{0,60}$ | $t_{0,55}$ |
|----------|-------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| 1        | 63.66       | 31.82      | 12.71       | 6.31       | 3.08       | 1.376      | 1.000      | 0.727      | 0.325      | 0.518      |
| 2        | 9.92        | 6.96       | 4.30        | 2.92       | 1.89       | 1.061      | 0.816      | 0.617      | 0.289      | 0.142      |
| 3        | 5.84        | 4.54       | 3.18        | 2.35       | 1.64       | 0.978      | 0.765      | 0.584      | 0.277      | 0.137      |
| 4        | 4.60        | 3.75       | 2.78        | 2.13       | 1.53       | 0.941      | 0.744      | 0.569      | 0.271      | 0.134      |
| 5        | 4.03        | 3.36       | 2.57        | 2.02       | 1.48       | 0.920      | 0.727      | 0.559      | 0.267      | 0.132      |
| 6        | 3.71        | 3.14       | 2.45        | 1.94       | 1.44       | 0.906      | 0.718      | 0.553      | 0.265      | 0.131      |
| 7        | 3.50        | 3.00       | 2.36        | 1.90       | 1.42       | 0.896      | 0.711      | 0.519      | 0.263      | 0.130      |
| 8        | 3.36        | 2.90       | 2.31        | 1.86       | 1.40       | 0.889      | 0.706      | 0.516      | 0.262      | 0.130      |
| 9        | 3.25        | 2.82       | 2.26        | 1.83       | 1.38       | 0.883      | 0.703      | 0.513      | 0.261      | 0.129      |
| 10       | 3.17        | 2.76       | 2.23        | 1.81       | 1.37       | 0.879      | 0.700      | 0.542      | 0.260      | 0.129      |
| 11       | 3.11        | 2.72       | 2.20        | 1.80       | 1.36       | 0.876      | 0.697      | 0.540      | 0.260      | 0.129      |
| 12       | 3.06        | 2.68       | 2.18        | 1.78       | 1.36       | 0.873      | 0.695      | 0.539      | 0.259      | 0.128      |
| 13       | 3.01        | 2.65       | 2.16        | 1.77       | 1.35       | 0.870      | 0.694      | 0.538      | 0.259      | 0.128      |
| 14       | 2.98        | 2.62       | 2.14        | 1.76       | 1.34       | 0.888      | 0.692      | 0.537      | 0.258      | 0.128      |
| 15       | 2.95        | 2.60       | 2.13        | 1.75       | 1.34       | 0.866      | 0.691      | 0.536      | 0.258      | 0.128      |
| 16       | 2.92        | 2.58       | 2.12        | 1.75       | 1.34       | 0.865      | 0.690      | 0.535      | 0.258      | 0.128      |
| 17       | 2.90        | 2.57       | 2.11        | 1.74       | 1.33       | 0.863      | 0.890      | 0.534      | 0.257      | 0.128      |
| 18       | 2.88        | 2.55       | 2.10        | 1.73       | 1.33       | 0.862      | 0.688      | 0.534      | 0.257      | 0.127      |
| 19       | 2.86        | 2.54       | 2.09        | 1.73       | 1.33       | 0.861      | 0.688      | 0.532      | 0.257      | 0.127      |
| 20       | 2.84        | 2.53       | 2.09        | 1.72       | 1.32       | 0.860      | 0.687      | 0.533      | 0.257      | 0.127      |
| 21       | 0.83        | 2.52       | 2.08        | 1.72       | 1.32       | 0.859      | 0.686      | 0.532      | 0.257      | 0.127      |
| 22       | 2.82        | 2.51       | 2.07        | 1.72       | 1.32       | 0.858      | 0.686      | 0.532      | 0.256      | 0.127      |
| 23       | 2.81        | 2.50       | 2.07        | 1.71       | 1.32       | 0.858      | 0.685      | 0.532      | 0.256      | 0.127      |
| 24       | 2.80        | 2.49       | 2.06        | 1.71       | 1.32       | 0.857      | 0.685      | 0.531      | 0.256      | 0.127      |
| 25       | 2.79        | 2.48       | 2.06        | 1.71       | 1.32       | 0.856      | 0.684      | 0.531      | 0.256      | 0.127      |
| 26       | 2.78        | 2.48       | 2.06        | 1.71       | 1.32       | 0.856      | 0.684      | 0.531      | 0.256      | 0.127      |
| 27       | 2.77        | 2.47       | 2.05        | 1.70       | 1.31       | 0.855      | 0.684      | 0.531      | 0.256      | 0.127      |
| 28       | 2.76        | 2.47       | 2.05        | 1.70       | 1.31       | 0.855      | 0.683      | 0.530      | 0.256      | 0.127      |
| 29       | 2.76        | 2.46       | 2.04        | 1.70       | 1.31       | 0.854      | 0.683      | 0.530      | 0.256      | 0.127      |
| 30       | 2.75        | 2.46       | 2.04        | 1.70       | 1.31       | 0.854      | 0.683      | 0.530      | 0.256      | 0.127      |
| 40       | 2.70        | 2.42       | 2.02        | 1.68       | 1.30       | 0.854      | 0.681      | 0.529      | 0.255      | 0.126      |
| 60       | 2.66        | 2.39       | 2.00        | 1.67       | 1.30       | 0.848      | 0.679      | 0.527      | 0.254      | 0.126      |
| 120      | 2.62        | 2.36       | 1.98        | 1.66       | 1.29       | 0.845      | 0.677      | 0.526      | 0.254      | 0.126      |
| $\infty$ | 2.58        | 2.33       | 1.96        | 1.645      | 1.28       | 0.842      | 0.674      | 0.521      | 0.253      | 0.126      |

Sumber : Metode Statistika karangan Sudjana, Penerbit Tarsito, Bandung, 2005

Table III. Oliver & Boyd, Ltd., Ediaburgh

**Nilai Persentil untuk Distribusi F**  
**(Bilangan dalam Badan Daftar menyatakan  $F_p$ ;**  
**Baris atas untuk  $p = 0,05$  dan Baris bawah untuk  $p = 0,01$ )**



| $v_2 = dk$<br>penyebut | $v_1 = dk$ pembilang |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
|------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                        | 1                    | 2              | 3              | 4              | 5              | 6              | 7              | 8              | 9              | 10             | 11             | 12             | 14             | 16             | 20             | 24             | 30             | 40             | 50             | 75             | 100            | 200            | 500            | $\infty$       |
| 1                      | 161<br>4052          | 200<br>4999    | 216<br>5403    | 225<br>5625    | 230<br>5764    | 234<br>5859    | 237<br>5928    | 239<br>5981    | 241<br>6022    | 242<br>6056    | 243<br>6082    | 244<br>6106    | 245<br>6142    | 246<br>6169    | 248<br>6208    | 249<br>6234    | 250<br>6258    | 251<br>6286    | 252<br>6302    | 253<br>6323    | 253<br>6334    | 254<br>6352    | 254<br>6361    | 254<br>6366    |
| 2                      | 18.51<br>98.49       | 19.00<br>99.01 | 19.16<br>99.17 | 19.25<br>99.25 | 19.30<br>99.30 | 19.33<br>99.33 | 19.36<br>99.34 | 19.37<br>99.36 | 19.38<br>99.38 | 19.39<br>99.40 | 19.40<br>99.41 | 19.41<br>99.42 | 19.42<br>99.43 | 19.43<br>99.44 | 19.44<br>99.45 | 19.45<br>99.46 | 19.46<br>99.47 | 19.47<br>99.48 | 19.47<br>99.48 | 19.48<br>99.49 | 19.49<br>99.49 | 19.49<br>99.49 | 19.50<br>99.50 | 19.50<br>99.50 |
| 3                      | 10.13<br>34.12       | 9.55<br>30.81  | 9.28<br>29.46  | 9.12<br>28.71  | 9.01<br>28.24  | 8.94<br>27.91  | 8.88<br>27.67  | 8.84<br>27.49  | 8.81<br>27.34  | 8.78<br>27.23  | 8.76<br>27.13  | 8.74<br>27.05  | 8.71<br>26.92  | 8.69<br>26.83  | 8.66<br>26.69  | 8.64<br>26.60  | 8.62<br>26.50  | 8.60<br>26.41  | 8.58<br>26.30  | 8.57<br>26.27  | 8.56<br>26.23  | 8.54<br>26.18  | 8.54<br>26.14  | 8.53<br>26.12  |
| 4                      | 7.71<br>21.20        | 6.94<br>18.00  | 6.59<br>16.69  | 6.39<br>15.98  | 6.26<br>15.52  | 6.16<br>15.21  | 6.09<br>14.98  | 6.04<br>14.80  | 6.00<br>14.66  | 5.96<br>14.54  | 5.93<br>14.45  | 5.91<br>14.37  | 5.87<br>14.24  | 5.84<br>14.15  | 5.80<br>14.02  | 5.77<br>13.93  | 5.74<br>13.83  | 5.71<br>13.74  | 5.70<br>13.69  | 5.68<br>13.61  | 5.66<br>13.57  | 5.65<br>13.52  | 5.64<br>13.48  | 5.63<br>13.46  |
| 5                      | 6.61<br>16.26        | 5.79<br>13.27  | 5.41<br>12.06  | 5.19<br>11.39  | 5.05<br>10.97  | 4.95<br>10.67  | 4.88<br>10.45  | 4.82<br>10.27  | 4.78<br>10.15  | 4.74<br>10.05  | 4.70<br>9.96   | 4.68<br>9.89   | 4.64<br>9.77   | 4.60<br>9.68   | 4.56<br>9.55   | 4.53<br>9.47   | 4.50<br>9.38   | 4.46<br>9.29   | 4.44<br>9.24   | 4.42<br>9.17   | 4.40<br>9.13   | 4.38<br>9.07   | 4.37<br>9.04   | 4.36<br>9.02   |
| 6                      | 5.99<br>13.74        | 5.14<br>10.92  | 4.76<br>9.78   | 4.53<br>9.15   | 4.39<br>8.75   | 4.28<br>8.47   | 4.21<br>8.26   | 4.15<br>8.10   | 4.10<br>7.98   | 4.06<br>7.87   | 4.03<br>7.79   | 4.00<br>7.72   | 4.96<br>7.60   | 3.92<br>7.52   | 3.87<br>7.39   | 3.81<br>7.31   | 3.81<br>7.23   | 3.77<br>7.14   | 3.75<br>7.09   | 3.72<br>7.02   | 3.71<br>6.99   | 3.69<br>6.94   | 3.68<br>6.90   | 3.67<br>6.88   |
| 7                      | 5.59<br>12.25        | 4.74<br>9.55   | 4.35<br>8.45   | 4.12<br>7.85   | 3.97<br>7.46   | 3.87<br>7.19   | 3.79<br>7.00   | 3.73<br>6.81   | 3.68<br>6.71   | 3.63<br>6.62   | 3.60<br>6.54   | 3.57<br>6.47   | 3.52<br>6.35   | 3.49<br>6.27   | 3.44<br>6.15   | 3.41<br>6.07   | 3.38<br>5.98   | 3.34<br>5.90   | 3.32<br>5.85   | 3.29<br>5.78   | 3.28<br>5.75   | 3.25<br>5.70   | 3.24<br>5.67   | 3.23<br>5.65   |
| 8                      | 5.32<br>11.26        | 4.74<br>8.65   | 4.35<br>7.59   | 4.12<br>7.01   | 3.97<br>6.63   | 3.87<br>6.37   | 3.79<br>6.19   | 3.73<br>6.03   | 3.68<br>5.91   | 3.63<br>5.82   | 3.60<br>5.74   | 3.57<br>5.67   | 3.52<br>5.56   | 3.49<br>5.48   | 3.44<br>5.36   | 3.41<br>5.28   | 3.38<br>5.20   | 3.34<br>5.11   | 3.32<br>5.06   | 3.29<br>4.96   | 3.28<br>4.91   | 3.25<br>4.88   | 3.24<br>4.86   | 3.23<br>4.86   |
| 9                      | 5.12<br>10.56        | 4.26<br>8.02   | 3.86<br>6.99   | 3.63<br>6.42   | 3.48<br>6.06   | 3.37<br>5.80   | 3.29<br>5.62   | 3.23<br>5.17   | 3.18<br>5.35   | 3.13<br>5.26   | 3.10<br>5.18   | 3.07<br>5.11   | 3.02<br>5.00   | 2.98<br>4.92   | 2.93<br>4.80   | 2.90<br>4.53   | 2.86<br>4.64   | 2.82<br>4.56   | 2.80<br>4.51   | 2.77<br>4.45   | 2.76<br>4.41   | 2.73<br>4.36   | 2.72<br>4.33   | 2.71<br>4.31   |
| 10                     | 4.96<br>10.04        | 4.10<br>7.56   | 3.71<br>6.55   | 3.48<br>5.99   | 3.33<br>5.64   | 3.22<br>5.39   | 3.14<br>5.21   | 3.07<br>5.06   | 3.02<br>4.95   | 2.97<br>4.85   | 2.94<br>4.78   | 2.91<br>4.71   | 2.86<br>4.60   | 2.82<br>4.52   | 2.77<br>4.41   | 2.74<br>4.33   | 2.70<br>4.25   | 2.67<br>4.17   | 2.64<br>4.12   | 2.61<br>4.05   | 2.59<br>4.01   | 2.56<br>3.96   | 2.55<br>3.93   | 2.54<br>3.91   |

**Lanjutan Distribusi F**

| v <sub>2</sub> = dk<br>penyebut | v <sub>1</sub> = dk pembilang |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                                 | 1                             | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 14   | 16   | 20   | 24   | 30   | 40   | 50   | 75   | 100  | 200  | 500  | ∞    |
| 11                              | 4.84                          | 3.98 | 3.59 | 3.36 | 3.20 | 3.09 | 3.01 | 2.95 | 2.90 | 2.86 | 2.82 | 2.79 | 2.74 | 2.70 | 2.65 | 2.61 | 2.57 | 2.53 | 2.50 | 2.47 | 2.45 | 2.42 | 2.41 | 2.40 |
|                                 | 9.65                          | 7.20 | 6.22 | 5.67 | 5.32 | 5.07 | 4.88 | 4.74 | 4.63 | 4.54 | 4.46 | 4.40 | 4.29 | 4.21 | 4.10 | 4.02 | 3.94 | 3.86 | 3.80 | 3.74 | 3.70 | 3.66 | 3.62 | 3.60 |
| 12                              | 4.75                          | 3.88 | 3.49 | 3.26 | 3.11 | 3.00 | 2.92 | 2.85 | 2.80 | 2.76 | 2.72 | 2.69 | 2.64 | 2.60 | 2.54 | 2.50 | 2.46 | 2.42 | 2.40 | 2.36 | 2.35 | 2.32 | 2.31 | 2.30 |
|                                 | 9.33                          | 6.93 | 5.95 | 5.41 | 5.06 | 4.82 | 4.65 | 4.50 | 4.39 | 4.30 | 4.22 | 4.16 | 4.05 | 3.98 | 3.86 | 3.78 | 3.70 | 3.61 | 3.56 | 3.49 | 3.46 | 3.41 | 3.38 | 3.36 |
| 13                              | 4.67                          | 3.80 | 3.41 | 3.18 | 3.02 | 2.92 | 2.84 | 2.77 | 2.72 | 2.67 | 2.63 | 2.60 | 2.55 | 2.51 | 2.46 | 2.42 | 2.38 | 2.34 | 2.32 | 2.28 | 2.26 | 2.24 | 2.31 | 2.30 |
|                                 | 9.07                          | 6.70 | 5.74 | 5.20 | 4.86 | 4.62 | 4.44 | 4.30 | 4.19 | 4.10 | 4.02 | 3.96 | 3.85 | 3.78 | 3.67 | 3.59 | 3.51 | 3.42 | 3.37 | 3.30 | 3.27 | 3.21 | 3.18 | 3.16 |
| 14                              | 4.67                          | 3.80 | 3.41 | 3.18 | 3.02 | 2.92 | 2.84 | 2.77 | 2.72 | 2.67 | 2.63 | 2.60 | 2.55 | 2.51 | 2.46 | 2.42 | 2.38 | 2.34 | 2.32 | 2.28 | 2.26 | 2.24 | 2.22 | 2.21 |
|                                 | 8.86                          | 6.51 | 5.56 | 5.03 | 4.69 | 4.46 | 4.28 | 4.14 | 4.03 | 3.94 | 3.86 | 3.80 | 3.70 | 3.62 | 3.51 | 3.43 | 3.34 | 3.26 | 3.21 | 3.14 | 3.11 | 3.06 | 3.02 | 3.00 |
| 15                              | 4.54                          | 3.68 | 3.29 | 3.06 | 2.90 | 2.79 | 2.70 | 2.64 | 2.59 | 2.55 | 2.51 | 2.48 | 2.43 | 2.39 | 2.33 | 2.29 | 2.25 | 2.21 | 2.18 | 2.15 | 2.12 | 2.10 | 2.06 | 2.07 |
|                                 | 8.68                          | 6.36 | 5.42 | 4.89 | 4.56 | 4.32 | 4.14 | 4.00 | 3.89 | 3.80 | 3.73 | 3.67 | 3.56 | 3.48 | 3.36 | 3.29 | 3.20 | 3.12 | 3.07 | 3.00 | 2.97 | 2.92 | 2.89 | 2.87 |
| 16                              | 4.49                          | 3.63 | 3.24 | 3.01 | 2.85 | 2.74 | 2.66 | 2.59 | 2.54 | 2.49 | 2.45 | 2.42 | 2.37 | 2.33 | 2.28 | 2.24 | 2.20 | 2.16 | 2.13 | 2.09 | 2.07 | 2.04 | 2.02 | 2.01 |
|                                 | 8.53                          | 6.23 | 5.29 | 4.77 | 4.44 | 4.20 | 4.03 | 3.89 | 3.78 | 3.69 | 3.61 | 3.55 | 3.45 | 3.37 | 3.25 | 3.18 | 3.10 | 3.01 | 2.96 | 2.89 | 2.86 | 2.80 | 2.77 | 2.75 |
| 17                              | 4.45                          | 3.56 | 3.20 | 2.96 | 2.81 | 2.70 | 2.62 | 2.55 | 2.50 | 2.45 | 2.41 | 2.38 | 2.33 | 2.29 | 2.23 | 2.19 | 2.15 | 2.11 | 2.08 | 2.04 | 2.02 | 1.99 | 1.97 | 1.96 |
|                                 | 8.40                          | 6.11 | 5.18 | 4.67 | 4.34 | 4.10 | 3.93 | 3.79 | 3.68 | 3.59 | 3.52 | 3.45 | 3.35 | 3.27 | 3.16 | 3.08 | 3.00 | 2.92 | 2.86 | 2.79 | 2.76 | 2.70 | 2.67 | 2.65 |
| 18                              | 4.41                          | 3.55 | 3.16 | 2.93 | 2.77 | 2.66 | 2.58 | 2.51 | 2.46 | 2.41 | 2.37 | 2.34 | 2.29 | 2.25 | 2.19 | 2.15 | 2.11 | 2.07 | 2.04 | 2.00 | 1.98 | 1.95 | 1.93 | 1.92 |
|                                 | 8.28                          | 6.01 | 5.09 | 4.58 | 4.25 | 4.01 | 3.85 | 3.71 | 3.60 | 3.51 | 3.44 | 3.37 | 3.27 | 3.19 | 3.07 | 3.00 | 2.91 | 2.83 | 2.78 | 2.71 | 2.68 | 2.62 | 2.59 | 2.57 |
| 19                              | 4.38                          | 3.52 | 3.13 | 2.90 | 2.74 | 2.63 | 2.55 | 2.48 | 2.43 | 2.38 | 2.34 | 2.31 | 2.26 | 2.21 | 2.15 | 2.11 | 2.07 | 2.02 | 2.00 | 1.96 | 1.94 | 1.91 | 1.90 | 1.88 |
|                                 | 8.18                          | 5.93 | 5.01 | 4.50 | 4.17 | 3.94 | 3.77 | 3.63 | 3.52 | 3.43 | 3.36 | 3.30 | 3.19 | 3.12 | 3.00 | 2.92 | 2.84 | 2.76 | 2.70 | 2.63 | 2.60 | 2.54 | 2.51 | 2.49 |
| 20                              | 4.35                          | 3.49 | 3.10 | 2.87 | 2.71 | 2.60 | 2.52 | 2.45 | 2.40 | 2.35 | 2.31 | 2.26 | 2.23 | 2.18 | 2.12 | 2.08 | 2.08 | 1.99 | 1.96 | 1.92 | 1.90 | 1.87 | 1.85 | 1.84 |
|                                 | 8.10                          | 5.85 | 4.94 | 4.43 | 4.10 | 3.87 | 3.71 | 3.56 | 3.45 | 3.37 | 3.30 | 3.23 | 3.13 | 3.05 | 2.94 | 2.86 | 2.77 | 2.69 | 2.63 | 2.56 | 2.53 | 2.47 | 2.44 | 2.42 |
| 21                              | 4.32                          | 3.47 | 3.07 | 2.84 | 2.68 | 2.57 | 2.49 | 2.42 | 2.37 | 2.32 | 2.28 | 2.25 | 2.20 | 2.15 | 2.09 | 2.05 | 2.00 | 1.96 | 1.93 | 1.89 | 1.87 | 1.84 | 1.82 | 1.81 |
|                                 | 8.02                          | 5.78 | 4.87 | 4.37 | 4.04 | 3.81 | 3.65 | 3.51 | 3.40 | 3.31 | 3.24 | 3.17 | 3.07 | 2.99 | 2.88 | 2.80 | 2.72 | 2.63 | 2.58 | 2.51 | 2.47 | 2.42 | 2.38 | 2.36 |
| 22                              | 4.30                          | 3.44 | 3.05 | 2.82 | 2.66 | 2.55 | 2.47 | 2.40 | 2.35 | 2.30 | 2.26 | 2.23 | 2.18 | 2.13 | 2.07 | 2.03 | 1.98 | 1.93 | 1.91 | 1.87 | 1.84 | 1.81 | 1.80 | 1.78 |
|                                 | 7.94                          | 5.72 | 4.82 | 4.31 | 3.99 | 3.76 | 3.59 | 3.45 | 3.35 | 3.26 | 3.18 | 3.12 | 3.02 | 2.94 | 2.83 | 2.75 | 2.67 | 2.58 | 2.53 | 2.46 | 2.42 | 2.37 | 2.33 | 2.31 |
| 23                              | 4.28                          | 3.42 | 3.03 | 2.80 | 2.64 | 2.53 | 2.45 | 2.38 | 2.32 | 2.28 | 2.24 | 2.20 | 2.14 | 2.10 | 2.04 | 2.00 | 1.96 | 1.91 | 1.88 | 1.84 | 1.82 | 1.79 | 1.77 | 1.76 |
|                                 | 7.88                          | 5.66 | 4.76 | 4.26 | 3.94 | 3.71 | 3.54 | 3.41 | 3.30 | 3.21 | 3.14 | 3.07 | 2.97 | 2.89 | 2.78 | 2.70 | 2.62 | 2.53 | 2.48 | 2.41 | 2.37 | 2.32 | 2.28 | 2.26 |
| 24                              | 4.26                          | 3.40 | 3.01 | 2.78 | 2.62 | 2.51 | 2.43 | 2.36 | 2.30 | 2.26 | 2.22 | 2.18 | 2.13 | 2.09 | 2.02 | 1.98 | 1.94 | 1.89 | 1.86 | 1.82 | 1.80 | 1.76 | 1.74 | 1.73 |
|                                 | 7.82                          | 5.61 | 4.72 | 4.22 | 3.90 | 3.67 | 3.50 | 3.36 | 3.25 | 3.17 | 3.09 | 3.03 | 2.93 | 2.85 | 2.74 | 2.66 | 2.58 | 2.49 | 2.44 | 2.36 | 2.33 | 2.27 | 2.23 | 2.21 |
| 25                              | 4.24                          | 3.38 | 2.99 | 2.76 | 2.60 | 2.49 | 2.41 | 2.34 | 2.28 | 2.24 | 2.20 | 2.16 | 2.11 | 2.06 | 2.00 | 1.96 | 1.92 | 1.87 | 1.84 | 1.80 | 1.77 | 1.74 | 1.72 | 1.71 |

**Lanjutan Distribusi F**

| v <sub>2</sub> = dk<br>penyebut | v <sub>1</sub> = dk pembilang |      |      |      |      |      |      |      |      |      |      |      |         |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|---------|------|------|------|------|------|------|------|------|------|------|------|
|                                 | 1                             | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 14      | 16   | 20   | 24   | 30   | 40   | 50   | 75   | 100  | 200  | 500  | ∞    |
|                                 | 7.77                          | 5.57 | 4.68 | 4.18 | 3.86 | 3.63 | 3.46 | 3.32 | 3.21 | 3.13 | 3.05 | 2.99 | 2.89    | 2.81 | 2.70 | 2.62 | 2.54 | 2.45 | 2.40 | 2.32 | 2.29 | 2.23 | 2.19 | 2.17 |
| 26                              | 4.22                          | 3.37 | 2.89 | 2.74 | 2.59 | 2.47 | 2.39 | 2.32 | 2.27 | 2.22 | 2.18 | 2.15 | 2.10    | 2.05 | 1.99 | 1.95 | 1.90 | 1.85 | 1.82 | 1.78 | 1.76 | 1.72 | 1.70 | 1.69 |
|                                 | 7.72                          | 5.53 | 4.64 | 4.14 | 3.82 | 3.59 | 3.42 | 3.29 | 3.17 | 3.09 | 3.02 | 2.96 | 2.86    | 2.77 | 2.66 | 2.58 | 2.50 | 2.41 | 2.36 | 2.28 | 2.25 | 2.19 | 2.15 | 2.13 |
| 27                              | 4.21                          | 3.35 | 2.96 | 2.73 | 2.57 | 2.46 | 2.37 | 2.30 | 2.25 | 2.20 | 2.16 | 2.13 | 2.08    | 2.03 | 1.97 | 1.93 | 1.88 | 1.84 | 1.80 | 1.76 | 1.74 | 1.71 | 1.68 | 1.67 |
|                                 | 7.68                          | 5.49 | 4.60 | 4.11 | 3.79 | 3.56 | 3.39 | 3.26 | 3.14 | 3.06 | 2.98 | 2.93 | 2.83    | 2.74 | 2.63 | 2.55 | 2.47 | 2.38 | 2.33 | 2.25 | 2.21 | 2.16 | 2.12 | 2.10 |
| 28                              | 4.20                          | 3.34 | 2.95 | 2.71 | 2.56 | 2.44 | 2.36 | 2.29 | 2.24 | 2.19 | 2.15 | 2.12 | 2.06    | 2.02 | 1.96 | 1.91 | 1.87 | 1.81 | 1.78 | 1.75 | 1.72 | 1.69 | 1.67 | 1.65 |
|                                 | 7.64                          | 5.45 | 4.57 | 4.07 | 3.76 | 3.53 | 3.36 | 3.23 | 3.11 | 3.03 | 2.95 | 2.90 | 2.80    | 2.71 | 2.60 | 2.52 | 2.44 | 2.35 | 2.30 | 2.22 | 2.18 | 2.13 | 2.09 | 2.06 |
| 29                              | 4.18                          | 3.33 | 2.93 | 2.70 | 2.54 | 2.43 | 2.35 | 2.28 | 2.22 | 2.18 | 2.14 | 2.10 | 2.05    | 2.00 | 1.94 | 1.90 | 1.85 | 1.80 | 1.77 | 1.73 | 1.71 | 1.68 | 1.65 | 1.64 |
|                                 | 7.60                          | 5.52 | 4.54 | 4.04 | 3.73 | 3.50 | 3.33 | 3.20 | 3.08 | 3.00 | 2.92 | 2.87 | 2.77    | 2.68 | 2.57 | 2.49 | 2.41 | 2.32 | 2.27 | 2.19 | 2.15 | 2.10 | 2.06 | 2.03 |
| 30                              | 4.17                          | 3.32 | 2.92 | 2.69 | 2.53 | 2.42 | 2.34 | 2.27 | 2.21 | 2.16 | 2.12 | 2.09 | 2.04    | 1.99 | 1.93 | 1.89 | 1.84 | 1.79 | 1.76 | 1.72 | 1.69 | 1.66 | 1.64 | 1.62 |
|                                 | 7.56                          | 5.39 | 4.51 | 4.02 | 3.70 | 3.47 | 3.30 | 3.17 | 3.06 | 2.98 | 2.90 | 2.84 | 2.74    | 2.66 | 2.55 | 2.47 | 2.38 | 2.29 | 2.24 | 2.16 | 2.13 | 2.07 | 2.03 | 2.01 |
| 32                              | 4.15                          | 3.30 | 2.90 | 2.67 | 2.51 | 2.40 | 2.32 | 2.25 | 2.19 | 2.14 | 2.10 | 2.07 | 2.02    | 1.97 | 1.91 | 1.86 | 1.82 | 1.76 | 1.74 | 1.69 | 1.67 | 1.64 | 1.61 | 1.59 |
|                                 | 7.50                          | 5.34 | 4.46 | 3.97 | 3.66 | 3.42 | 3.25 | 3.12 | 3.01 | 2.94 | 2.86 | 2.80 | 2.70    | 2.62 | 2.51 | 2.42 | 2.34 | 2.25 | 2.20 | 2.12 | 2.08 | 2.02 | 1.98 | 1.96 |
| 34                              | 4.13                          | 3.28 | 2.88 | 2.65 | 2.49 | 2.38 | 2.30 | 2.23 | 2.17 | 2.12 | 2.08 | 2.05 | 2.00    | 1.95 | 1.89 | 1.84 | 1.80 | 1.74 | 1.71 | 1.67 | 1.64 | 1.61 | 1.59 | 1.57 |
|                                 | 7.44                          | 5.29 | 4.42 | 3.93 | 3.61 | 3.38 | 3.21 | 3.08 | 2.97 | 2.89 | 2.82 | 2.76 | 2.66    | 2.58 | 2.47 | 2.38 | 2.30 | 2.21 | 2.15 | 2.08 | 2.04 | 1.98 | 1.94 | 1.91 |
| 36                              | 4.11                          | 3.26 | 2.80 | 2.63 | 2.48 | 2.36 | 2.28 | 2.21 | 2.15 | 2.10 | 2.06 | 2.03 | 1.89    | 1.93 | 1.87 | 1.82 | 1.78 | 1.72 | 1.69 | 1.65 | 1.62 | 1.59 | 1.56 | 1.55 |
|                                 | 7.39                          | 5.25 | 4.38 | 3.89 | 3.58 | 3.35 | 3.18 | 3.04 | 2.94 | 2.86 | 2.78 | 2.72 | 2.62    | 2.54 | 2.43 | 2.35 | 2.26 | 2.17 | 2.12 | 2.04 | 2.00 | 1.94 | 1.90 | 1.87 |
| 38                              | 4.10                          | 3.25 | 2.85 | 2.62 | 2.46 | 2.35 | 2.26 | 2.19 | 2.14 | 2.09 | 2.05 | 2.02 | 1.96    | 1.92 | 1.85 | 1.80 | 1.76 | 1.71 | 1.67 | 1.63 | 1.60 | 1.57 | 1.54 | 1.53 |
|                                 | 7.35                          | 5.21 | 4.34 | 3.86 | 3.54 | 3.32 | 3.15 | 3.02 | 2.91 | 2.82 | 2.75 | 2.69 | 2.59    | 2.51 | 2.40 | 2.32 | 2.22 | 2.14 | 2.08 | 2.00 | 1.97 | 1.90 | 1.86 | 1.84 |
| 40                              | 4.08                          | 3.23 | 2.84 | 2.61 | 2.45 | 2.34 | 2.25 | 2.18 | 2.12 | 2.07 | 2.04 | 2.00 | 1.95    | 1.90 | 1.84 | 1.79 | 1.74 | 1.69 | 1.66 | 1.61 | 1.59 | 1.55 | 1.53 | 1.51 |
|                                 | 7.31                          | 5.18 | 4.31 | 3.83 | 3.51 | 3.29 | 3.12 | 2.99 | 2.88 | 2.80 | 2.73 | 2.66 | 2.56.00 | 2.49 | 2.37 | 2.29 | 2.20 | 2.11 | 2.05 | 1.97 | 1.94 | 1.88 | 1.84 | 1.81 |
| 42                              | 4.07                          | 3.22 | 2.83 | 2.59 | 2.44 | 2.32 | 2.24 | 2.17 | 2.11 | 2.06 | 2.02 | 1.99 | 1.94    | 1.89 | 1.82 | 1.78 | 1.73 | 1.68 | 1.64 | 1.60 | 1.57 | 1.54 | 1.51 | 1.49 |
|                                 | 7.27                          | 5.15 | 4.29 | 3.80 | 3.49 | 3.26 | 3.10 | 2.96 | 2.86 | 2.77 | 2.70 | 2.64 | 2.54    | 2.46 | 2.35 | 2.26 | 2.17 | 2.08 | 2.02 | 1.94 | 1.91 | 1.85 | 1.80 | 1.78 |
| 44                              | 4.06                          | 3.21 | 2.82 | 2.58 | 2.43 | 2.31 | 2.23 | 2.16 | 2.10 | 2.05 | 2.01 | 1.98 | 1.92    | 1.88 | 1.81 | 1.76 | 1.72 | 1.66 | 1.63 | 1.58 | 1.56 | 1.52 | 1.50 | 1.48 |
|                                 | 7.24                          | 5.12 | 4.26 | 3.78 | 3.46 | 3.24 | 3.07 | 2.94 | 2.84 | 2.75 | 2.68 | 2.62 | 2.52    | 2.44 | 2.32 | 2.24 | 2.15 | 2.06 | 2.00 | 1.92 | 1.88 | 1.82 | 1.78 | 1.75 |
| 46                              | 4.05                          | 3.20 | 2.81 | 2.57 | 2.42 | 2.30 | 2.22 | 2.14 | 2.09 | 2.04 | 2.00 | 1.97 | 1.91    | 1.87 | 1.80 | 1.75 | 1.71 | 1.65 | 1.62 | 1.57 | 1.54 | 1.51 | 1.48 | 1.46 |
|                                 | 7.21                          | 5.10 | 4.24 | 3.76 | 3.44 | 3.22 | 3.05 | 2.92 | 2.82 | 2.73 | 2.66 | 2.60 | 2.50    | 2.42 | 2.30 | 2.22 | 2.13 | 2.04 | 1.98 | 1.90 | 1.86 | 1.80 | 1.76 | 1.72 |
| 48                              | 4.04                          | 3.19 | 2.80 | 2.56 | 2.41 | 2.30 | 2.21 | 2.14 | 2.08 | 2.03 | 1.99 | 1.96 | 1.90    | 1.86 | 1.79 | 1.74 | 1.70 | 1.64 | 1.61 | 1.56 | 1.53 | 1.50 | 1.47 | 1.45 |
|                                 | 7.19                          | 5.08 | 4.22 | 3.74 | 3.42 | 3.20 | 3.04 | 2.90 | 2.80 | 2.71 | 2.64 | 2.58 | 2.48    | 2.40 | 2.28 | 2.20 | 2.11 | 2.02 | 1.96 | 1.88 | 1.84 | 1.78 | 1.73 | 1.70 |

**Lanjutan Distribusi F**

| v <sub>2</sub> = dk<br>penyebut | v <sub>1</sub> = dk pembilang |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------------|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                                 | 1                             | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 14   | 16   | 20   | 24   | 30   | 40   | 50   | 75   | 100  | 200  | 500  | ∞    |
| 50                              | 4.03                          | 3.18 | 2.79 | 2.56 | 2.10 | 2.29 | 2.20 | 2.13 | 2.07 | 2.02 | 1.98 | 1.95 | 1.90 | 1.85 | 1.78 | 1.74 | 1.69 | 1.63 | 1.60 | 1.55 | 1.52 | 1.48 | 1.46 | 1.44 |
|                                 | 7.17                          | 5.06 | 4.20 | 3.72 | 3.44 | 3.18 | 3.02 | 2.88 | 2.78 | 2.70 | 2.62 | 2.56 | 2.16 | 2.39 | 2.26 | 2.18 | 2.10 | 2.00 | 1.91 | 1.86 | 1.82 | 1.76 | 1.71 | 1.68 |
| 55                              | 4.02                          | 3.17 | 2.78 | 2.51 | 3.38 | 2.27 | 2.18 | 2.11 | 2.05 | 2.00 | 1.97 | 1.93 | 1.88 | 1.83 | 1.76 | 1.72 | 1.67 | 1.61 | 1.58 | 1.52 | 1.50 | 1.46 | 1.43 | 1.41 |
|                                 | 7.12                          | 5.01 | 4.16 | 3.68 | 3.37 | 3.15 | 2.98 | 2.85 | 2.75 | 2.66 | 2.59 | 2.53 | 2.43 | 2.35 | 2.23 | 2.15 | 2.00 | 1.96 | 1.90 | 1.82 | 1.78 | 1.71 | 1.66 | 1.64 |
| 60                              | 4.00                          | 3.15 | 2.76 | 2.52 | 2.37 | 2.25 | 2.17 | 2.10 | 2.01 | 1.99 | 1.95 | 1.92 | 1.86 | 1.81 | 1.75 | 1.70 | 1.65 | 1.59 | 1.56 | 1.50 | 1.18 | 1.44 | 1.41 | 1.39 |
|                                 | 7.08                          | 4.98 | 4.13 | 3.63 | 3.31 | 3.12 | 2.95 | 2.82 | 2.72 | 2.03 | 2.36 | 2.30 | 2.10 | 2.32 | 2.20 | 2.12 | 2.03 | 1.93 | 1.87 | 1.79 | 1.71 | 1.68 | 1.63 | 1.60 |
| 65                              | 3.99                          | 3.14 | 2.75 | 2.51 | 2.36 | 2.21 | 2.15 | 2.08 | 2.02 | 1.98 | 1.91 | 1.90 | 1.85 | 1.80 | 1.73 | 1.68 | 1.63 | 1.57 | 1.51 | 1.49 | 1.46 | 1.42 | 1.39 | 1.37 |
|                                 | 7.01                          | 4.95 | 4.10 | 3.62 | 3.31 | 3.09 | 2.93 | 2.79 | 2.70 | 2.61 | 2.51 | 2.47 | 2.37 | 2.30 | 2.18 | 2.09 | 2.00 | 1.90 | 1.81 | 1.76 | 1.71 | 1.61 | 1.60 | 1.56 |
| 70                              | 3.98                          | 3.13 | 2.74 | 2.50 | 2.35 | 2.32 | 2.11 | 2.07 | 2.01 | 1.97 | 1.93 | 1.89 | 1.81 | 1.79 | 1.72 | 1.67 | 1.62 | 1.56 | 1.53 | 1.47 | 1.45 | 1.40 | 1.37 | 1.35 |
|                                 | 7.01                          | 4.92 | 4.08 | 3.60 | 3.29 | 3.07 | 2.91 | 2.77 | 2.67 | 2.59 | 2.51 | 2.45 | 2.35 | 2.28 | 2.15 | 2.07 | 1.98 | 1.88 | 1.82 | 1.74 | 1.69 | 1.63 | 1.56 | 1.53 |
| 80                              | 3.96                          | 3.11 | 2.72 | 2.18 | 2.33 | 2.21 | 2.12 | 2.05 | 1.99 | 1.95 | 1.91 | 1.88 | 1.82 | 1.77 | 1.70 | 1.65 | 1.60 | 1.51 | 1.51 | 1.45 | 1.42 | 1.38 | 1.35 | 1.32 |
|                                 | 6.96                          | 4.86 | 4.04 | 3.58 | 3.25 | 3.01 | 2.87 | 2.71 | 2.61 | 2.55 | 2.18 | 2.11 | 2.32 | 2.21 | 2.11 | 2.03 | 1.94 | 1.84 | 1.78 | 1.70 | 1.65 | 1.57 | 1.52 | 1.49 |
| 100                             | 3.91                          | 3.09 | 2.70 | 2.46 | 2.30 | 2.19 | 2.10 | 2.03 | 1.97 | 1.92 | 1.88 | 1.85 | 1.79 | 1.75 | 1.68 | 1.63 | 1.57 | 1.51 | 1.18 | 1.12 | 1.39 | 1.34 | 1.30 | 1.28 |
|                                 | 6.90                          | 4.82 | 3.98 | 3.51 | 3.20 | 2.99 | 2.82 | 2.69 | 2.59 | 2.51 | 2.13 | 2.36 | 2.26 | 2.19 | 2.06 | 1.98 | 1.89 | 1.79 | 1.73 | 1.64 | 1.59 | 1.51 | 1.46 | 1.43 |
| 125                             | 3.92                          | 3.07 | 2.68 | 2.44 | 2.29 | 2.17 | 2.08 | 2.01 | 1.95 | 1.90 | 1.86 | 1.83 | 1.77 | 1.72 | 1.65 | 1.60 | 1.55 | 1.49 | 1.45 | 1.39 | 1.36 | 1.31 | 1.27 | 1.25 |
|                                 | 6.81                          | 4.78 | 3.94 | 3.17 | 3.17 | 2.95 | 2.79 | 2.65 | 2.56 | 2.17 | 2.40 | 2.33 | 2.23 | 2.15 | 2.03 | 1.94 | 1.85 | 1.75 | 1.68 | 1.59 | 1.54 | 1.46 | 1.40 | 1.37 |
| 150                             | 3.91                          | 3.06 | 2.67 | 2.43 | 2.27 | 2.16 | 2.07 | 2.00 | 1.94 | 1.89 | 1.85 | 1.82 | 1.76 | 1.71 | 1.64 | 1.59 | 1.51 | 1.47 | 1.44 | 1.37 | 1.34 | 1.29 | 1.25 | 1.22 |
|                                 | 6.81                          | 4.75 | 3.91 | 3.14 | 3.13 | 2.92 | 2.76 | 2.62 | 2.53 | 2.44 | 2.37 | 2.30 | 2.20 | 2.12 | 2.00 | 1.91 | 1.83 | 1.72 | 1.66 | 1.56 | 1.51 | 1.43 | 1.37 | 1.33 |
| 200                             | 3.86                          | 3.04 | 2.65 | 2.41 | 2.26 | 2.14 | 2.05 | 1.98 | 1.92 | 1.87 | 1.83 | 1.80 | 1.74 | 1.69 | 1.62 | 1.57 | 1.52 | 1.45 | 1.42 | 1.35 | 1.32 | 1.26 | 1.22 | 1.19 |
|                                 | 6.79                          | 4.74 | 3.88 | 3.41 | 3.11 | 2.90 | 2.73 | 2.60 | 2.50 | 2.41 | 2.34 | 2.28 | 2.17 | 2.09 | 1.97 | 1.88 | 1.79 | 1.69 | 1.62 | 1.53 | 1.48 | 1.39 | 1.33 | 1.28 |
| 400                             | 3.86                          | 3.02 | 2.62 | 2.39 | 2.23 | 2.12 | 2.03 | 1.96 | 1.90 | 1.85 | 1.81 | 1.78 | 1.72 | 1.67 | 1.60 | 1.54 | 1.49 | 1.42 | 1.38 | 1.32 | 1.28 | 1.22 | 1.16 | 1.13 |
|                                 | 6.70                          | 4.66 | 3.83 | 3.36 | 3.06 | 2.85 | 2.69 | 2.55 | 2.46 | 2.37 | 2.29 | 2.23 | 2.12 | 2.04 | 1.92 | 1.84 | 1.74 | 1.64 | 1.57 | 1.47 | 1.42 | 1.32 | 1.24 | 1.19 |
| 1000                            | 3.85                          | 3.00 | 2.61 | 2.38 | 2.22 | 2.10 | 2.02 | 1.95 | 1.89 | 1.84 | 1.80 | 1.76 | 1.70 | 1.65 | 1.58 | 1.53 | 1.47 | 1.41 | 1.36 | 1.30 | 1.26 | 1.19 | 1.13 | 1.08 |
|                                 | 6.68                          | 1.62 | 3.80 | 3.34 | 3.04 | 2.82 | 2.66 | 2.53 | 2.13 | 2.34 | 2.26 | 2.20 | 2.09 | 2.01 | 1.89 | 1.81 | 1.71 | 1.61 | 1.54 | 1.44 | 1.38 | 1.28 | 1.19 | 1.11 |
| ∞                               | 3.84                          | 2.99 | 2.60 | 2.37 | 2.21 | 2.09 | 2.01 | 1.94 | 1.88 | 1.83 | 1.79 | 1.75 | 1.69 | 1.64 | 1.57 | 1.52 | 1.46 | 1.40 | 1.35 | 1.28 | 1.24 | 1.17 | 1.11 | 1.00 |
|                                 | 6.64                          | 4.60 | 3.78 | 3.32 | 3.02 | 2.80 | 2.64 | 2.51 | 2.41 | 2.32 | 2.24 | 2.18 | 2.07 | 1.99 | 1.87 | 1.79 | 1.69 | 1.59 | 1.52 | 1.41 | 1.36 | 1.25 | 1.15 | 1.00 |

Sumber : Metode Statistika karangan Sudjana, Penerbit Tarsito, Bandung, 2005

**Tabel Interpretasi Nilai  $r_{xy}$**   
**(Kriteria Indeks Koefisien Korelasi)**

| <b>Besarnya <math>r_{xy}</math><br/>Product Momment</b> | <b>Interpretasi Data</b>  |
|---|---|
| 0,00 - 0,20   | Artinya variabel X dan variabel Y memang terdapat korelasi, tetapi korelasi itu sangat kecil atau sangat rendah sehingga diabaikan. |
| 0,20 - 0,40   | Antara variabel X dan variabel Y terdapat korelasi yang lemah atau rendah.  |
| 0,40 - 0,70   | Antara variabel X dan variabel Y terdapat korelasi yang cukup atau sedang.  |
| 0,70 - 0,90   | Antara variabel X dan variabel Y terdapat korelasi yang kuat dan tinggi.  |
| 0,90 - 1,00   | Antara variabel X dan variabel Y terdapat korelasi yang sangat kuat atau sangat tinggi.   |

Sumber: Anas Sudjono, Pengantar Statistik Pendidikan, (Jakarta: Rajawali Press), h. 190



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# KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN UNIVERSITAS NEGERI JAKARTA

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Nomor : 2709/H39.12/PL/2012  
Lamp. : -  
Hal : **Permohonan Izin Penelitian untuk Skripsi**

1 Mei 2012

Yth. **Kepala SMAN 4 Jakarta**  
di tempat

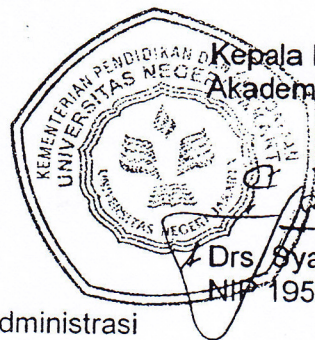
Kami mohon kesediaan Saudara, untuk dapat menerima Mahasiswa Universitas Negeri Jakarta :

Nama : **Listiya Pujianingsih**  
Nomor Registrasi : 8125077937  
Program Studi : Pendidikan Ekonomi Koperasi  
Fakultas : Ekonomi  
Untuk mengadakan : Penelitian untuk Skripsi

Di : **SMAN 4 Jakarta**  
**Jl. Batu No 3 Gambir, Jakarta Pusat**

Guna mendapatkan data yang diperlukan dalam rangka Penulisan Skripsi dengan Judul  
**"Hubungan Antara Minat Berwirausaha Dengan Hasil Belajar Kewirausahaan."**

Atas perhatian dan kerjasama Saudara, kami ucapkan terima kasih.



Kepala Biro Administrasi  
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- ❖ Praktek Pengalaman Langsung (PPL) di SMA Negeri 4 Jakarta Pusat pada bulan Agustus 2010 sampai dengan bulan Desember 2010