

Lampiran 1

Daftar Hasil Tes Kadar Hemoglobin (X) dan Kapasitas Aerobik Maksimal (Y) pada atlet Anggar Tangerang Raya *Fencing Club* (TRFC), berdasarkan urutan dari kadar hemoglobin yang terendah.

NO	NAMA	Kadar Hemoglobin (gr/dl)	Kapasitas Aerobik Maksimal (ml/kg.BB/menit)
1	M. Fuad Ardiyanto	11,7	39,9
2	Bagus Angger Saputro	11,7	41,1
3	Rizki Ardiyansah	11,9	41,8
4	M.Lathif As. Syukron	12,0	40,4
5	Arya Alfathdi	12,2	43,3
6	Raja Alif Adhi Budoyo	12,8	44,5
7	Anwar Adi Raharjo	13,4	47,4
8	Fauzi Akbar	13,5	45,8
9	Boy Alexander Ramadan	13,6	46,8
10	Ray Farhan Mubarak	13,6	47,4
11	Leonard Marsel	13,7	41,8
12	Gilang Jati Irawan	13,8	43,9
13	Deny Julistia	13,8	46,8
14	M.Dany Haikal	13,9	47,4
15	Ari Rahmat	14,2	39,9
16	Bagas Sudarsono	14,3	42,4
17	M. Chikal Maulidna	14,4	49,3
18	Fajar Nur Fauzan	14,5	48
19	Aditya Rizqi Suryadi	15,4	50,2
20	Lukman Faisal	15,7	48
	JUMLAH	270,1	896,1

Lampiran 2

Data Mentah Hasil Tes Kadar Hemoglobin (X) dan Kapasitas Aerobik Maksimal (Y) pada atlet Anggar Tangerang Raya *Fencing Club* (TRFC).

NO	X	Y	X²	Y²	XY
1	11,7	39,9	136,9	1592,01	466,83
2	11,7	41,1	136,9	1689,21	480,87
3	11,9	41,8	141,6	1747,24	497,42
4	12,0	40,4	144,0	1632,16	484,8
5	12,2	43,3	148,8	1874,89	528,26
6	12,8	44,5	163,8	1980,25	569,6
7	13,4	47,4	179,6	2246,76	635,16
8	13,5	45,8	182,3	2097,64	618,3
9	13,6	46,8	185,0	2190,24	636,48
10	13,6	47,4	185,0	2246,76	644,64
11	13,7	41,8	187,7	1747,24	572,66
12	13,8	43,9	190,4	1927,21	605,82
13	13,8	46,8	190,4	2190,24	645,84
14	13,9	47,4	193,2	2246,76	658,86
15	14,2	39,9	201,6	1592,01	566,58
16	14,3	42,4	204,5	1797,76	606,32
17	14,4	49,3	207,4	2430,49	709,92
18	14,5	48	210,3	2304	696
19	15,4	50,2	237,2	2520,04	773,08
20	15,7	48	246,5	2304	753,6
Σ	270,1	896,1	3673,0	40356,9	12151,0

Lampiran 3

Langkah – Langkah Perhatian Distribusi Frekuensi.

A. Variabel Kadar Hemoglobin (X)

$$\begin{aligned} \text{Rentang (R)} &= \text{data terbesar} - \text{data terkecil} \\ &= 15,7 - 11,7 \\ &= 4 \end{aligned}$$

$$\begin{aligned} \text{Banyak Kelas (BK)} &= 1 + (3,3) \log n \\ &= 1 + (3,3) \log 20 \\ &= 1 + (3,3) (1,3) \\ &= 1 + 4,29 \\ &= 5,29 \text{ (6)} \end{aligned}$$

$$\begin{aligned} \text{Panjang Kelas (PK)} &= \frac{R}{BK} \\ &= \frac{4}{6} \\ &= 0,67 \end{aligned}$$

NO	Kelas Interval	Titik Tengah	Frekuensi	
			Absolut	Relatif (%)
1	11,7 – 12,4	12,05	5	25%
2	12,5 – 13,1	12,8	1	5%
3	13,2 – 13,7	13,45	5	25%
4	13,8 – 14,4	14,1	6	30%
5	14,5 – 15,1	14,8	1	5%
6	15,2 – 15,7	15,45	2	10%
Jumlah			20	100%

B. Variabel Kapasitas Aerobik Maksimal (Y)

$$\begin{aligned}\text{Rentang (R)} &= \text{data terbesar} - \text{data terkecil} \\ &= 50,2 - 39,9 \\ &= 10,3\end{aligned}$$

$$\begin{aligned}\text{Banyak Kelas (BK)} &= 1 + (3,3) \log n \\ &= 1 + (3,3) \log 20 \\ &= 1 + (3,3) (1,3) \\ &= 1 + 4,29 \\ &= 5,29 \text{ (6)}\end{aligned}$$

$$\begin{aligned}\text{Panjang Kelas (PK)} &= \frac{R}{BK} \\ &= \frac{10,3}{6} \\ &= 1,71\end{aligned}$$

NO	Kelas Interval	Titik Tengah	Frekuensi	
			Absolut	Relatif (%)
1	39,9 – 41,6	40,75	5	25%
2	41,7 – 43,3	42,5	3	15%
3	43,4 – 45,1	44,25	2	10%
4	45,2 – 46,8	46	3	15%
5	46,9 – 48,5	47,7	5	25%
6	48,6 – 50,2	49,4	2	10%
Jumlah			20	100%

Lampiran 4

Langkah – Langkah perhitungan.

A. Menghitung Rata – rata dan Simpangan Baku

a. Variabel kadar Hemoglobin (X)

Diketahui :

$$\Sigma X = 270,1$$

$$\Sigma X^2 = 3673,0$$

$$n = 20$$

$$\begin{aligned} 1. \text{ Rata – Rata } X &= \frac{\Sigma X}{n} \\ &= \frac{270,1}{20} \\ &= 13,5 \end{aligned}$$

$$\begin{aligned} 2. \text{ Simpangan Baku} &= \sqrt{\frac{n \Sigma X^2 - (\Sigma X)^2}{n(n-1)}} \\ &= \sqrt{\frac{20(3673,0) - (270,1)^2}{20(20-1)}} \\ &= \sqrt{\frac{73460 - 72954,01}{380}} \\ &= \sqrt{1,33} \end{aligned}$$

$$= 1,15$$

$$3. \text{ Varians} = 1,32$$

b. Variabel Kapasitas Aerobik Maksimal (Y)

Diketahui :

$$\Sigma Y = 896,1$$

$$\Sigma Y^2 = 40356,9$$

$$n = 20$$

$$\begin{aligned} 1. \text{ Rata - Rata } X &= \frac{\Sigma X}{n} \\ &= \frac{896,1}{20} \\ &= 44,805 \end{aligned}$$

$$\begin{aligned} 2. \text{ Simpangan Baku} &= \sqrt{\frac{n \Sigma Y^2 - (\Sigma Y)^2}{n(n-1)}} \\ &= \sqrt{\frac{(20)(40356,9) - (896,1)^2}{20(20-1)}} \\ &= \sqrt{\frac{807138 - 802995,21}{20(20-1)}} \\ &= \sqrt{\frac{4142,79}{380}} \\ &= \sqrt{10,902} \\ &= 3,301 \end{aligned}$$

$$3. \text{ Varians} = 10,902$$

Lampiran 5

Perhitungan Mencari Persamaan Regresi.

Regresi Y atas X

Diketahui :

$$\begin{array}{ll} \Sigma X & = 270,1 & \Sigma Y^2 & = 40356,9 \\ \Sigma X^2 & = 3673,0 & \Sigma XY & = 12151,0 \\ \Sigma Y & = 896,1 & n & = 2 \end{array}$$

$$\begin{aligned} a &= \frac{(\Sigma Y)(\Sigma X^2) - (\Sigma X)(\Sigma XY)}{N(\Sigma X^2) - (\Sigma X)^2} \\ &= \frac{(896,1)(3673,0) - (270,1)(12151,0)}{20(3673,0) - (270,1)^2} \\ &= \frac{3291375,3 - 3281985,1}{506} \\ &= 18,5577075099 \end{aligned}$$

$$\begin{aligned} b &= \frac{N(\Sigma XY) - (\Sigma X)(\Sigma Y)}{N(\Sigma X^2) - (\Sigma X)^2} \\ &= \frac{20(12151) - (270,1)(896,1)}{20(3673) - (270,1)^2} \\ &= \frac{243020 - 242036,61}{506} \\ &= 1,943458498 \end{aligned}$$

Jadi persamaan Regresi Y terhadap X adalah :

$$Y = a + bX$$

$$Y = 18,5577075099 + 1,943458498 X$$

Lampiran 6

Mencari Koefisien Korelasi dan Uji Keberartian Koefisien Korelasi.

1. Koefisien Korelasi r_{xy}

$$\begin{aligned}r_{xy} &= \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{\{N(\sum X^2) - (\sum X)^2\}\{N(\sum Y^2) - (\sum Y)^2\}}} \\&= \frac{20(12151) - (270,1)(896,1)}{\sqrt{\{20(3673) - (270,1)^2\}\{20(40356,9) - (896,1)^2\}}} \\&= \frac{243020 - 242036,61}{\sqrt{(73460 - 72954,01)(807138 - 802995,21)}} \\&= \frac{983,39}{\sqrt{(505,99)(4142,79)}} \\&= \frac{983,39}{\sqrt{2096210,3121}} \\&= \frac{983,39}{1447,8295176228} \\&= 0,6792167089\end{aligned}$$

2. Uji Keberartian Koefisien Korelasi

$$\begin{aligned}t &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\&= \frac{0,6792167089 \sqrt{20-2}}{\sqrt{1-(0,6792167089)^2}} \\&= \frac{2,8816724446}{\sqrt{0,5386646624}} \\&= \frac{2,8816724446}{0,7339377783} \\&= 3,9263170935\end{aligned}$$

$$\begin{aligned}
\text{Tabel dk} &= n - 2 \\
&= 20 \\
&= 18 \\
t_{\text{tabel}} &= dk : 1 - \frac{1}{2} \alpha \\
&= 18 : 1 - \frac{1}{2} (0,05) \\
&= 18 : 1 - 0,025 \\
&= 18 : 0,975 \\
&= 2,10092
\end{aligned}$$

Berarti:

t_{tabel} dengan $\alpha = 0,05$ dan $dk = 18$ diperoleh tabel sebesar 2,10092, karena $t_{\text{hitung}} = 3,92631 > t_{\text{tabel}} = 2,10092$ dengan demikian kita terima tolak H_0 , berarti koefisien korelasi 0,67921 adalah signifikan