

Lampiran 11 : Sumbangan Relatif dan Efektif

Persiapan perhitungan

$$\begin{array}{ll} \Sigma X_1 & = 3239.80 & \Sigma X_1 Y & = 74221.9 \\ \Sigma X_2 & = 48.30 & \Sigma X_2 Y & = 1103.3 \\ \Sigma X_3 & = 392.77 & \Sigma X_3 Y & = 8987.02 \\ \Sigma Y & = 458.00 & N & = 20 \end{array}$$

Persamaan garis regresi:

$$\hat{Y} = 56.528 + 0.090X_1 - 4.095X_2 - 1.948X_3$$

$$b_1 = 0.090$$

$$b_2 = -4.095$$

$$b_3 = -1.948$$

$$\Sigma x_1 y = \Sigma X_1 Y - \frac{(\Sigma X_1)(\Sigma Y)}{N}$$

$$\Sigma x_1 y = 74221.9 - \frac{(3239.80)(458.00)}{20}$$

$$\Sigma x_1 y = \mathbf{30.48}$$

$$\Sigma x_2 y = \Sigma X_2 Y - \frac{(\Sigma X_2)(\Sigma Y)}{N}$$

$$\Sigma x_2 y = 1103.3 - \frac{(48.30)(458.00)}{20}$$

$$\Sigma x_2 y = \mathbf{-2.77}$$

$$\Sigma x_3 y = \Sigma X_3 Y - \frac{(\Sigma X_3)(\Sigma Y)}{N}$$

$$\Sigma x_3 y = 8987.02 - \frac{(392.77)(458.00)}{20}$$

$$\Sigma x_3 y = \mathbf{-7.413}$$

$$\mathbf{JK\ Regresi} = 28.515$$

$$\mathbf{JK\ Total} = 39.800$$

$$SR = \frac{bn.\Sigma x_n y}{JK(Reg)} \times 100\%$$

$$SE = \frac{bn.\Sigma x_n y}{JK(Tot)} \times 100\%$$

$$\text{Efektivitas garis regresi} = \frac{JK(Reg)}{JK(Tot)} \times 100\%$$

Prediktor Tinggi Badan

$$SR = \frac{b_1.\Sigma x_1 y}{JK(Reg)} \times 100\%$$

$$SR = \frac{(0.090)(30.48)}{28.515} \times 100\%$$

$$SR = \mathbf{9.62\ \%}$$

$$SE = \frac{b_1.\Sigma x_1 y}{JK(Tot)} \times 100\%$$

$$SE = \frac{(0.090)(30.48)}{39.800} \times 100\%$$

$$SE = \mathbf{6.89\%}$$

Prediktor Kecepatan Lari

$$SR = \frac{b_2 \cdot \Sigma x_2 y}{JK(\text{Reg})} \times 100\%$$

$$SR = \frac{(-4.095)(-2.77)}{28.515} \times 100\%$$

$$SR = \mathbf{39.78\%}$$

$$SE = \frac{b_2 \cdot \Sigma x_2 y}{JK(\text{Tot})} \times 100\%$$

$$SE = \frac{(-4.095)(-2.77)}{39.800} \times 100\%$$

$$SE = \mathbf{28.50\%}$$

Prediktor Kelincahan

$$SR = \frac{b_3 \cdot \Sigma x_3 y}{JK(\text{Reg})} \times 100\%$$

$$SR = \frac{(-1.948)(-7.413)}{28.515} \times 100\%$$

$$SR = \mathbf{50.64\%}$$

$$SE = \frac{b_3 \cdot \Sigma x_3 y}{JK(\text{Tot})} \times 100\%$$

$$SE = \frac{(-1.948)(-7.413)}{39.800} \times 100\%$$

$$SE = \mathbf{36.28\%}$$

$$\begin{aligned}\text{Efektivitas garis regresi} &= \frac{\text{JK(Reg)}}{\text{JK(Tot)}} \times 100\% \\ &= \frac{28.515}{39.800} \times 100\% \\ &= \mathbf{71.65 \%}\end{aligned}$$