

$$\begin{aligned}
 170 &= 10a + 60b_1 + 50b_2 & \dots (1) \\
 1003 &= 60a + 906b_1 + 302b_2 & \dots (2) \\
 886 &= 50a + 302b_1 + 266b_2 & \dots (3)
 \end{aligned}$$

Pers. (1) dikalikan 6, persamaan (2) dikalikan 1

$$\begin{array}{rcl}
 1020 & = & 60a + 360b_1 + 300b_2 \\
 1003 & = & 60a + 906b_1 + 302b_2 \\
 \hline
 17 & = & 0a + (-46b_1) + (-2b_2)
 \end{array}$$

$$17 = -46b_1 - 2b_2 \dots (4)$$

Pers. (1) dikalikan 5, persamaan (3) dikalikan 1

$$850 = 50a + 300b_1 + 250b_2$$

$$886 = 50a + 302b_1 + 266b_2 \quad -$$

$$-36 = 0a + (-2)b_1 + (-16)b_2$$

$$-36 = -2b_1 - 16b_2 \dots (5)$$

Pers (4) dikalikan 1, persamaan (5) dikalikan 23

$$17 = -46b_1 - 2b_2$$

$$-828 = -46b_1 - 416b_2 \quad -$$

$$845 = 0b_1 + 44b_2$$

$$b_2 = 845 / 44 = 19,2$$

Harga b_2 dimasukkan ke salah satu persamaan (4) atau (5)

$$17 = -46b_1 - 2b_2$$

$$17 = -46b_1 - 2(19,2)$$

$$17 = -46b_1 - 38,4$$

$$46b_2 = -38,4 - 17$$

$$46b_2 = -55,4$$

$$b_2 = -1,2$$

$$\text{Jadi } b_1 = -1,2 \text{ dan } b_2 = 19,2$$

Maka b_1 dan b_2 dimasukkan ke pers 1

$$170 = 10a + 60b_1 + 50b_2$$

$$170 = 10a + 60(-1,2) + 50(19,2)$$

$$170 = 10a - 72 + 960$$

$$170 = 10a + 888$$

$$10a = 170 - 888$$

$$10a = -718$$

$$a = -718 / 10 = -71,8$$

Jadi:

$$a = -71,8$$

$$b_1 = -1,2$$

$$b_2 = 19,2$$

$$2. \frac{b_1 \sum x_1 y + b_2 \sum x_2 y}{\sum y^2}$$

$$= \frac{-1,2 \cdot 1003 + 19,2 \cdot 886}{3162}$$

$$= \frac{-1,203 + 17.000,2}{3162}$$

$$= \frac{16.998,9}{3162} = 5,37$$

koefisien R^2

$$R^2 = 5,137^2 \\ = 28,18$$

$$F_{hitung} = \frac{R^2 (N - k - 1)}{k (1 - R^2)} \\ = \frac{28,18 (10 - 2 - 1)}{2 (1 - 28,18)} \\ = \frac{201,6}{-56,16} = -3,5$$

$$F_{Tabel} = 4,74$$

$F_{hitung} (-3,5) < F_{tabel} (4,74)$, Jadi H_0 diterima
Jadi, Promosi dan harga tidak berpengaruh signifikan terhadap keputusan konsumen membeli deterjen merk ATTACK