

Exercice 11 :

$$\bar{x} = 3, \bar{y} = 4/5, s_x^2 = 2, s_y^2 = 14/25, c_{x,y} = 1$$

$$y = \frac{1}{2}x - \frac{7}{10}.$$

Exercice 12 :

$$\bar{t} = 7, \bar{y} = 163, s_t^2 = 0.5, s_y = 22, c_{t,y} = 15$$

$$y = 30t - 47.$$

$$r_{y,t} = 0.96 \text{ d'où } R^2 = 0.92.$$

Prédiction : pour $t = 7,5$, $\hat{y} = 178$.

Exercice 13.2 :

$$y = -9x + 9.83, r_{t,y} = -0.7 \text{ d'où } R^2 = 0.5.$$

Exercice 14 :

1. $y = 0.221x + 10.627$.
2. $x = 2.20y - 5.45$
3. $r_{x,y} = 0.7$ d'où $R^2 = 0.5$.