

Answer on Question #55262 – Math – Statistics and Probability

$$s_y=4$$

$$r=-0.6$$

$$b_1=-2$$

$$b_0=30$$

$$y=18$$

Find x and s_x

Solution

Linear equation is

$$y = b_0 + b_1x.$$

$$x = \frac{y - b_0}{b_1} = \frac{18 - 30}{-2} = 6.$$

Using

$$b_1 = r \frac{s_y}{s_x},$$

$$s_x = r \frac{s_y}{b_1} = -0.6 \frac{4}{-2} = 1.2.$$