

Answer on Question #40613, Math, Statistics and Probability

A linear regression has  $b = 3$  and  $a = 4$ . What is the predicted  $Y$  for  $X = 7$ ?

**Solution**

The regression line can be expressed as

$$Y = a \cdot X + b.$$

In our case ( $b = 3$  and  $a = 4$ ):

$$Y = 4 \cdot X + 3.$$

The predicted  $Y$  for  $X = 7$  is

$$Y(7) = 4 \cdot 7 + 3 = 31.$$

**Answer: 31.**