

17) Sofia sells bracelets for \$5 each. The function rule  $b(x) = 5x$  models the total amount of money she makes.

- a) Dependent variable: the amount of money made  
b) Independent Variable: the number of bracelets made.  
c) If Sofia writes  $b(6) = 30$ , tell what the 6 and the 30 mean in a sentence.

6 bracelets cost \$30.

- d) Calculate  $b(8)$ . What does your answer mean in the context of the problem?

$$b(8) = 5(8)$$

8 bracelets cost \$40.

$$b(8) = 40$$

- e) Find an  $x$  for which  $b(x) = 100$ . Explain what your answer means in the context of the problem.

$$b(x) = 100$$

$$5x = 100$$

$$x = 20$$

To make \$100, you'd make 20 bracelets.