Algebra 1 B **Name _____**

Unit 3 Objective 1 Practice **Period _____ Date _____**

1. Juan wants to have a dinner with friends. He decides to get a caterer. The caterer tells Juan that it will cost $80 to have dinner for 4 people and $170 for 10 people.

a. Identify what the x and y variables stand for in the problem above.

x-value is _____

y-value is _____

b. Identify the rate of change.

c. Interpret (describe) what your answer in part *b* means.

d. If the caterer charges at the same rate, how much would it cost Juan if he wanted to have 14 total people at the dinner party?

2. Mya is raising money for cancer research by selling bracelets she makes. If she sells 30 bracelets she will raise $60. She will raise $375 if she sells 120 bracelets.

a. Identify what the x and y variables stand for in the problem above.

x-value is _____

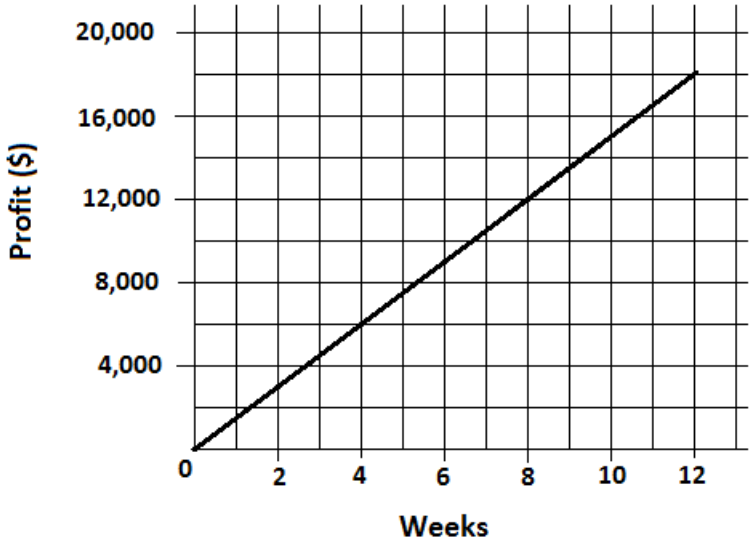
y-value is _____

b. Identify the rate of change.

c. Interpret (describe) what your answer in part *b* means.

d. How much money would Mya raise if she sells 200 bracelets?

3. The graph below shows the profit that an ice cream shop had over the course of 12 weeks.



a. Identify what the x and y variables stand for in the problem above.

x-value is _____

y-value is _____

b. Identify the rate of change.

c. Interpret (describe) what your answer in part *b* means.

d. If the ice cream store continues to make a profit at the same rate, how much money would they raise after 15 weeks?