CCSS Algebra 1 Name_____

Homework U5 Block 3

1. What are important graphical features of proportional relationships? Circle all correct statements:

a. The graph is a straight line.

b. The line has a ***y***-intercept of 0.

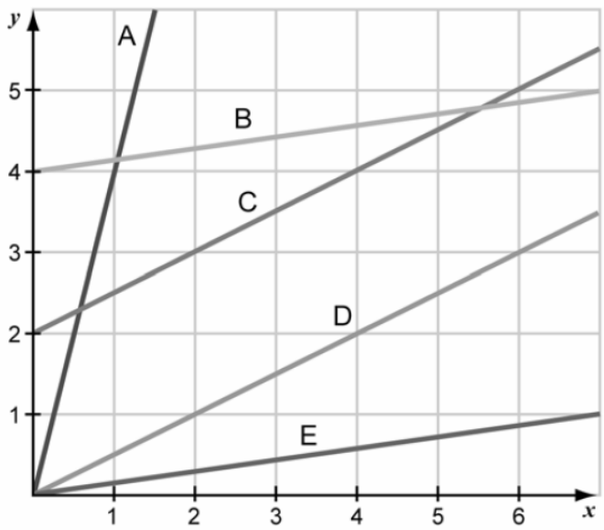
c. The line passes through the origin.

d. The line has an ***x***-intercept of 0.

e. The line passes through the point (0,0).

Use the graph to answer questions 2–5.

2. Which lines represent proportional relationships? Explain how you know.



3. Find the rate of change for each line.

A:

B:

C:

D:

E:

4. Find the constant of proportionality for each proportional relationship.

5. Write a function rule for each proportional relationship.

6. (a) Identify whether the relationship represents direct variation. If it does, write the constant of proportionality. (b) Write the rule.

a.

X	Y
2	16
3	24
5	40

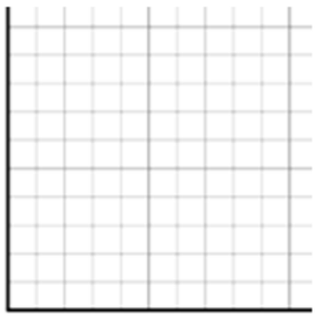
b.

X	Y
-3	6
0	0
7	-14
-2.5	5

c.

X	Y
0	5
2	15
4	25
6	35

7. Gloria charges $5 for every hour she babysits. Graph five data points that represent the situation.



Does Gloria's situation represent direct variation? If so, what is the constant of proportionality?

Write a rule that can be used to represents Gloria's situation.

8. Create a table that represents a proportional relationship.

9. Sketch a graph that represents a proportional relationship.

10. Write 3 rules that represent 3 different proportional relationships.