1.4 Proportional Equations Intro

NAME:_____

Corrective Assignment

DATE:_____

In the following tables *y* is proportional to *x*. Write an equation that relates *y* to *x*.

1.

x	*y*
5	10
6	12
9	18
12	24

2.

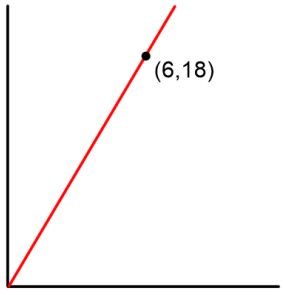
x	*y*
12	4
9	3
15	6
21	7

3.

x	0	4	8	12
y	0	20	40	60

Use the graph to write an equation that relates *y* to *x*.

4.



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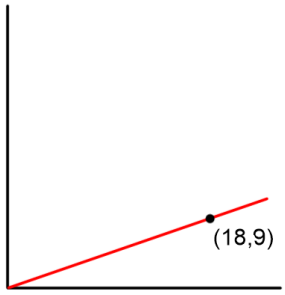

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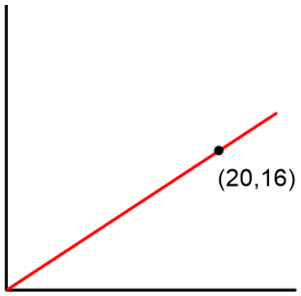

Write an equation that models the relationship.

7. Mr Kelly gets 12 new followers on Insta every 3 days.

8. Mr Brust bakes 18 cookies every 2 hours.

9. Cereal cost 12 dollars for 5 boxes.

State the constant of proportionality (unit rate) for each equation.

10. $y = 2.75x$

k = _____

11. $y = \frac{1}{3}x$

k = _____

12. $h = 4t$

k = _____

13. The table shows the cost to make a bowl of soup. The cost is proportional to the number of bowls made.

Bowls of Soup Made (#)	2	5	6	9
Cost ($)	3	7.5	9	13.5

Fill in the blank to create an equation that models the relationship between headphones made and cost.

$$c = \_\_\_\_\_\ n$$

cost **number of bowls of soup made**

14. The table shows the cost to make a hat. The cost is proportional to the number of hats made.

Hats Made (#)	3	4	8	12
Cost ($)	18	24	48	72

Fill in the blank to create an equation that models the relationship between headphones made and cost.

$$c = \_\_\_\_\_\ n$$

cost **number of hats made**

ANSWERS TO 1.4 CORRECTIVE ASSIGNMENT

1. $y = 2x$	2. $y = \frac{1}{3}x$	3. $y = 5x$
4. $y = 3x$	5. $y = \frac{1}{2}x$ or $y = 0.5x$	6. $y = \frac{4}{5}x$ or $y = 0.8x$
7. $y = 4x$ (followers per day) or $y = \frac{1}{4}x$ (days per follower)	8. $y = 9x$ (cookies per hour) or $y = \frac{1}{9}x$ (hours per cookie)	9. $y = \frac{12}{5}x$ (dollars per box) or $y = \frac{5}{12}x$ (boxes per dollar)
10. $k = 2.75$	11. $k = \frac{1}{3}$	12. $k = 4$
13. $c = 1.5n$	14. $c = 6n$	