Name: _____ Class: _____ Date: _____ ID: S

Math: Proportional Relationships STUDY GUIDE

Write the ratio as a fraction in simplest form.

1 21 girls to 35 boys _____

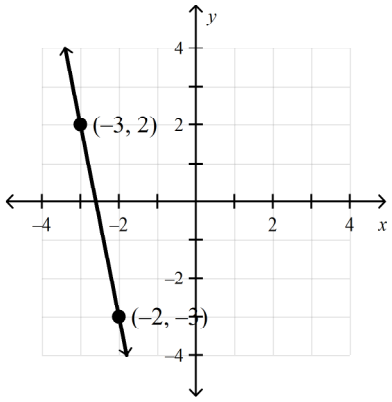
Find the unit rate.

2 1,044 mi. in 12 hr. _____ mi./hr.

3 $\frac{2}{3}$ ounces for $\frac{7}{8}$ servings _____ oz./ser.

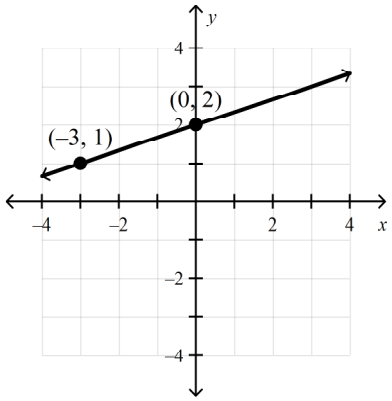
Find the slope of the line.

4



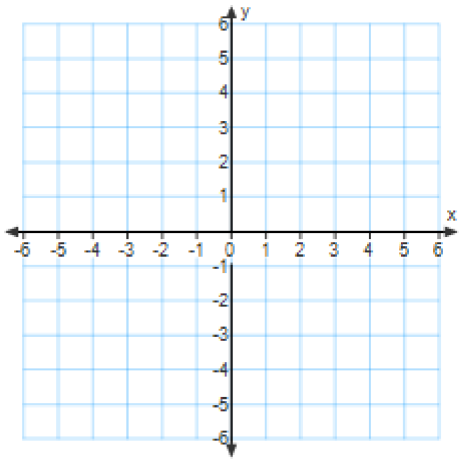
4.) m = _____

5



5.) m = _____

6 Draw a line through $(3, 1)$ with a slope of $\frac{2}{3}$.



Tell whether the ratios form a proportion. Circle Yes or No.

7 $\frac{42}{60}, \frac{28}{40}$

7.) Yes No

8 $\frac{6.2}{9.6}, \frac{31}{48}$

8.) Yes No

Solve the proportion.

9 $\frac{1}{5} = \frac{n}{12}$

9.) n = _____

10 $\frac{k}{8} = \frac{15}{12}$

10.) k = _____

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11 $\frac{2}{9} = \frac{3}{q}$

11.) q = _____

12 You can buy 25 pops for $10. How much do 16 pops cost?

12.) $ _____

13 It costs $99.60 for 6 people to attend a concert. How much does it cost a group of 14 people?

13.) $ _____

14 **Does this data represent a proportional relationship? Justify your answer.**

Quarters	3	6	7	10
Minutes	21.6	43.2	50.4	72.0

14.) Yes No

15 The graph of a proportional relationship has two qualities:

1.) _____

2.) _____

The graph of a proportional relationship passes through the given point & (1, *y*). Find *y*.

16 Given point: (4, 28)

15.) y = _____

17 The table shows your earnings y for x hours of work. Does this data represent a situation with a constant or varying rate of change?

x	4	7	10	13
y	$30.00	$52.50	$75.00	$97.50

Circle: Constant Varying

If constant, what is the rate of change?: _____

18 Write an equation of the proportional relationship.

x	1.4	2.6	3.8	5
y	8.4	15.6	22.8	30

18.) y = _____ x

19 *** B * O * N * U * S ***

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Math: Proportional Relationships STUDY GUIDE
Answer Section

1 $\frac{3 \text{ girls}}{5 \text{ boys}}$

2 87 mi./hr.

3 $\frac{16}{21}$ oz ./ser.

4 –5

5 $\frac{1}{3}$

6 through (0, -1) and (3, 1)

7 yes

8 yes

9 2.4

10 10

11 13.5

12 $6.40

13 $232.40

14 yes

15 1.) It is a straight line.
2.) It goes through the origin.

16 7

17 constant, $7.50/hr.

18 $y = 6x$

19 .