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## Ratios and Proportions Test Review

1. A parking lot contains 18 American cars and 63 foreign cars. Write the ratio of American cars to foreign cars in simples $\dagger$ form.
2. During a trip, a car traveled 249.2 miles in 4 hours. How many miles per hour did the car travel?
3. Two drinks are on sale at a store. Drink $A$ costs $\$ 1.28$ for 16 ounces. Drink $B$ costs $\$ 2.16$ for 24 ounces. Determine the unit rates, and find which drink costs less per ounce.
4. Seven bananas contain 3.5 milligrams of Vitamin B6. How many bananas contain 9.31 milligrams of Vitamin B6? Round to the nearest whole banana.
5. Terry paid $\$ 8.75$ for 5 pounds of pears. At this rate how many pounds of pears could she buy with $\$ 61.25$ ?
a. 7 lb
b. 12 lb
c. 13 lb
d. $\quad 35 \mathrm{lb}$
6. Write a proportion and solve to find the missing measurement. grade has 100 students. Which statement correctly compares the ratio of boys to total students in each grade?
A. The eighth grade ratio is greater.
B. The eighth grade ratio is lesser.
C. Both ratios are equal.
D. I have no idea!
7. Find the distance between Raleigh and Detroit if they are 16 cm apart on a map with a scale of $3 \mathrm{~cm}: 160$ miles. (round to the nearest tenth)

Draw a picture and solve using a proportion. Round to the tenths place.
9. If a 42.9 ft tall flagpole casts a 253.1 ft long shadow then how long is the shadow that a 6.2 ft tall woman casts?
10. A girl that is 4 feet tall is standing next to the Empire State Building in New York City. The girl's shadow is 3.2 feet long. If the Empire State Building is 1454 feet tall, how long would its shadow be?
11. Jimmy is building a model plane. The scale of the model is 3 inch $=12$ feet. What is the scale? (Simplify)
12. A house is 25 feet high. On a scale model of the house, the height is 5 inches long. What is the scale of the model? (Simplify)
13. The following chart shows the pay a babysitter made for different hours of work. Does the babysitter's pay represent a proportional relationship?

| Number of <br> hours | Pay |
| :--- | :--- |
| 0 | $\$ 0$ |
| 2 | $\$ 15$ |
| 3 | $\$ 24.75$ |
| 11 | $\$ 107.25$ |

14. Fill in the following table and identify the constant of proportionality.

| Minutes | Words <br> Typed |
| :--- | :--- |
| 12 | 96 |
| 6 |  |
| 3 |  |
| 1 |  |

Constant of Proportionality $=$ $\qquad$
16. Johnny is making chocolate chip muffins to sell for a fundraiser. His recipe calls for 6 ounces (oz) of chocolate chips for every 2 cups (c) of flour.

1) Complete the table.
2) Graph the points on the coordinate plane.

Make sure to label the $x$ and $y$ axis.


| Choc. <br> Chips <br> (oz) | Flour <br> (cups) |
| :---: | :---: |
| 6 | 2 |
| 12 |  |
| 8 |  |
| 0 |  |
| 4 |  |

3) Is the relationship between chocolate chips and flour proportional? Explain your answer below using the table or graph.
17. Write the slope-intercept form of the equation.

18. Write the slope-intercept form of the equation.

19. Draw the graph of each line. $y=\frac{3}{2} x+3$

20. Draw the graph of each line.
$y=5$

21. Write the slope-intercept form of the equation.

22. Write the slope-intercept form of the equation.

23. Draw the graph of each line.
$y=-x-1$

24. Draw the graph of each line.
$x=2$

