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**Accelerated 6th Grade Math - Assessment 6 Review Guide**

***6.RP.1 Ratios (NO CALCULATOR)***

1. The following fruits are used in a recipe for a fruit salad:

8 oranges 4 strawberries

2 bananas 6 apples

1. Compare the number of apples to oranges using a ratio.
2. Compare the number of strawberries to apples using a ratio.
3. Compare the number of bananas to total pieces of fruit using a ratio.

2. The ratio of cats to dogs is 8:9. Which of the following ratios are equivalent?

a) 16 cats to 18 dogs b) 9 cats to 8 dogs c) 4 cats to 5 dogs

d) 7 cats to 8 dogs e) 24 cats to 27 dogs f) 72 cats to 81 dogs

***6.RP.2 Unit Rates (NO CALCULATOR)***

3. Grapes are for sale at Walmart. You can buy 4 pounds for $8.00.

1. What is the rate per pound?
2. What is the rate per dollar?
3. If Kim buys grapes for $24, how much did the grapes weigh in pounds?
4. If Jamal wants to buy 30 pounds of grapes, how much money will he need?

4. Maggie is shopping for a new car and sees that there are 35 gas-powered cars and 28 electric cars. Represent the number of gas-powered cars to electric cars as a unit rate. Use words, symbols, or a diagram to show what you know about unit rate in this problem.

***6.RP.3a*** ***Ratio Tables and Graphs (CALCULATORS PERMITTED)***

5. The ratio in a cup of lemonade of powder to water is 1:4.

* 1. Create a ratio table to represent the relationship between the ingredients.

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* 1. If Sammy makes 35 total cups of lemonade, how many scoops of powder will she need? How many scoops of water will she need?

6. Brian and Marie are trying to figure out who drives the fastest. Brian’s car traveled 120 miles in 4 hours. Marie’s car traveled 90 miles in 2 hours. Who has the faster rate? Justify your answer.

*Brian’s Rate: Maria’s Rate:*

*Who has the fastest rate? Justify your answer.*

7. What is the better price: 4 sneakers for $24.60 or 3 sneakers for $19.50? Justify your answer using unit rates.

8. A recipe states that for every 5 cups of water, mix in 2 cups of sugar. Complete the ratio table for this recipe. Then, plot the points on the coordinate grid. Be sure to number and label your x-axis and y-axis!

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| --- | --- |
| Cups of Water | Cups of Sugar |
| 5 | 2 |
|  | 4 |
| 15 |  |
|  | 8 |

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***6.RP.3b Solve problems using the unit rate (CALCULATORS PERMITTED)***

9. If it takes Tommy 10 hours to clean 4 gutters, at what rate were the gutters being cleaned per hour?

10. If Mrs. Galan purchases 6 tickets for $129, what is the cost for 8 tickets?

11. A 16-oz. package of pasta costs $3.59.

a) Find the unit rate per ounce.

b) At the same rate, what is the cost of a 25-oz. package of the same pasta?

***6.RP.3d Convert metric and customary units (CALCULATORS PERMITTED)***

12. How many centimeters are in 5 feet?

13. After a 3 hour storm, a leak upstairs in my house filled up 16 quart-sized buckets. The leak downstairs filled up 5 gallon-sized cartons. Which one is leaking more water? How do you know?

14. Ellis and Jackson drive 20 miles on a road trip. How far is this distance in kilometers?

15. How many inches are in 3 miles (given that 1 m = 5,280 feet)? Explain how you found your answer using words, numbers, and/or symbols.

16. Ferb weighs 45 kilograms. What is his weight in pounds?

17. Carol wants to make a blanket pattern that measures 120 centimeters wide by 3.5 feet long. She finds a fabric that she wants to use, but it lists its measurements in inches.

a) How many inches does she need for the width?

b) How many inches does she need for the length?

18. How many pints are in 5.2 ounces?

19. How many ounces are in 42 cups?

20. Charlie and Bella are in a race. In 15 minutes, Charlie has run 2 kilometers and Bella has run 1.5 miles. Who has run father? How do you know?

21. How many meters are in 260 inches?

22. Phineas weighs 94 pounds. What is his weight in kilograms?

23. Sponge Bob weighs 8 pounds. What is his weight in kilograms?

24. Patrick weighs 4 kilograms. What is his weight in pounds?