

1) Roberto is making cookies using a recipe. He will use $\frac{2}{5}$ of every measurement listed in the recipe. If the recipe requires $2\frac{3}{4}$ cup of water, how much water should Roberto use?

2) Billy has \$378.50 in his savings account. Over the next 5 weeks he withdraws \$24.90 per week. How much does Billy have in his savings account after 5 weeks?

3) Which equation represents the associative property?

a) $3 + (4 + 2) = (3 + 4) + 2$

b) $3 + (4 + 2) = 3 + (2 + 4)$

c) $4 + 0 = 4$

d) $3(4 + 2) = 3(4) + 3(2)$

4) A cargo plane can hold 28 tons of cargo. There is currently 7 tons of cargo on the plane. What percent of the cargo plane is empty?

5) The results of a morning voting session of 200 students are shown in the table.

Favorite Color	Number of Votes
Blue	60
Red	40
Green	70
Orange	30

Based on the results in the table, how many more votes will be expected for the color red, if 500 more students vote in the afternoon?

6) Based on the table listed above, what fraction of the students in the vote preferred green?

7) Based on the table listed above, what percent of the students in the vote preferred blue?

8) Jake set a goal to study for 13 hours this week. On Monday, he studied for $1\frac{1}{3}$ hours. He studied for $3\frac{3}{4}$ hours on Tuesday and $\frac{4}{5}$ hour on Wednesday. How many hours will Jake have to study during the rest of the week to meet his goal?

9) A circle has a diameter of 43 cm. What is the area of that circle? Round to the nearest tenth.

10) A store sold 180 candy bars in 12 days. If sales continue at the same rate, which is the best prediction of the number of candy bars the store could expect to sell in 40 days?

11) Solve $3\frac{4}{5} \div \frac{3}{4}$ (as a fraction).

12) Solve $6\frac{1}{3} - 3\frac{5}{6}$ (as a fraction).

13) Mr. Charlie has a puppy that is 16.65 inches long. Write this length as a fraction?

14) Which expression is equivalent to $8(m + 3) + 5m$?

a) $13m + 3$
c) $29m$

b) $16m$
d) $13m + 24$

15) Write “6 more than the product of 9 and 2 times a number n ” as an algebraic expression.

16) The circumference of a tire is 100.48 centimeters. What is the radius of the same tire?

17 & 18) Randi made a necklace with red and blue beads. For every 4 red beads that she used, she used 3 blue beads. If she wants to make a necklace with the same ratio of red beads to blue beads that has between 22 and 42 beads, what's the most number of red beads she can use? What's the fewest blue beads should she could use?

19 & 20) For every 5 miles Ben runs, Nolan runs 4 miles. For every 3 miles Jillian runs, Jose runs 2.5 miles. What is the ratio of miles Nolan runs to miles that Ben runs? Can you write a ratio of miles Nolan runs to miles Jillian runs? Explain why or why not.

21) Heather surveyed her class to see which subject is the student's favorite. Students had to choose one subject from the provided list. The results are as follows: 6 students liked reading the best, 13 students like math the best, 5 students like social studies the best and the rest of the class likes science the best. The ratio of students who like math best to total students surveyed is 13 to 29. What is the ratio of students who like science best to students who like reading best?

22-24) Select True or False to indicate whether each comparison is true. What is the difference between the greatest expression and the lowest expression (the value found on either side of the inequality)?

	True	False	Difference
$4^3 < 4(6^2 - 12 \div 3) \div (6 - 4)$			
$12.3 \bullet 3.6 \div 1.8 > 2.3^3 - 3.007 + 0.2$			
$4 \frac{3}{5} \div 3 \frac{1}{3} < 2 \frac{5}{8} - 1 \frac{1}{4}$			

Bonus: What is the area of a triangle that has the following dimensions: length = 12.6 ft. and a width = 14.3 ft. Round to the nearest tenth, if necessary.