Name: _____

Write all answers on the lines provided.

There are 10 roses and 14 sunflowers in a garden. Write a ratio for the statements below:

- 1. Roses to sunflowers _____
- 2. Sunflowers to total flowers
- 3. Roses to total flowers _____

Find the unknown value in the proportion. (Hint: Cross products)

4.
$$\frac{n}{6} = \frac{51}{102}$$

5.
$$\frac{2}{4} = \frac{8}{c}$$

6.
$$\frac{7}{5} = \frac{q}{3}$$

7.
$$\frac{10}{8} = \frac{x}{10}$$

8. The Crayola Crayon Company can make 2400 crayons in 4 minutes. How many crayons can they make in 15 minutes?

9. The Bigtown football team outscored its opponents 5:2 last season. If their opponents scored 38 points, how many points did Bigtown score?

10. Determine if the following ratios form a proportion. Write yes or no on the line next to each ratio.

a.
$$\frac{10}{35} = \frac{8}{28}$$

a.
$$\frac{10}{35} = \frac{8}{28}$$
 b. $\frac{2}{5} = \frac{8}{20}$ c. $\frac{4}{7} = \frac{12}{21}$

c.
$$\frac{4}{7} = \frac{12}{21}$$

Determine the mean, median, mode, and range of the data sets below.

35, 56, 34, 44, 52, 12, 34, 45

5, 5, 6, 3, 5, 4, 3, 2, 6

Solve

1.) 8^3 _____ 2.) 6^0 _____ 3.) 11^2 ____ 4.) 5^1 ____

Solve

1.)
$$(6-3+1+2) \div (5-3+1) =$$
 _____ 2.) $(5 \times 1) + 3^2 - 2$ ____

2.)
$$(5 \times 1) + 3^2 - 2$$

3.)
$$8 \times (8-8) \div 8$$

3.)
$$8 \times (8-8) \div 8$$
 ______ 4.) $2 \div 1 + 2 + 9 \div 9 =$ _____

Solve and SHOW YOUR WORK

1.) You can buy 3 apples at the Quick Market for \$1.26 or you can buy 5 of the same apples at Stop and Save for \$1.20. Which place is the better buy? 2.) The bakers at Healthy Bakery can make 270 bagels in 2 hours. How many bagels can they bake in 20 hours?

3.) A ferris wheel can accommodate 65 people in 20 minutes. What is the rate per hour? How many people can ride the ferris wheel in 4 hours?

4.) Write the unite rate: \$4.50 for 10 muffins

5.) Write the unit rate: \$12.35 for 13 cans

Solve

1.)
$$\frac{4}{9}$$
 y - 2 = 6 ______ 2.) x - 4 = 8 _____

3.)
$$\frac{c}{5} = 10$$

Write the following as a decimal.

Write the following as a percent.

- 2.) 28 _____ 3.) .18 ____

Write the following as a fraction.

- 1.) 80% _____
- 2.) 25% _____
- 3.) 0.6 _____

Solve

1.) 18 is 30% of what number?

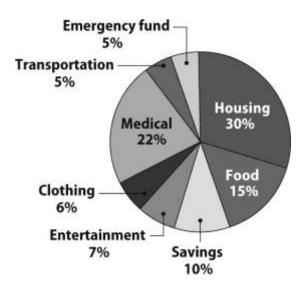
2.) 63 is 21% of what number?

3.) What percent of 80 is 20?

4.) What number is 20% of 75?

5). Mary took 20 shots at her basketball game and made 15. What percent did she miss?

6.) The Jenkins family's monthly budget is shown in the circle graph. The family has a monthly income of \$4,800. How much money do they spend on transportation each month?



Simplify each expression. Circle your answer.

1.) - 34 + -28	2.) - 95 + 47	3.) -8+8
4.) 12 – 13	5)1 – (-11)	6) 55 – (- 55)
7.) -7 x (-8)	8.) 12 x 12	9.) 9 x (-5)
10.) 81 ÷ (-9)	11.) -12 ÷ (-4)	12.) -18 ÷ 3
13.) 0 – (- 75)	14.) 18 + (-32)	15.) -21 + (-16)
16.) -24 + (-99) + 18	17.) – 22 + (-40) – (-5)	18.) 17 – (- 5) + 48

Geometry Review (round your answer to the nearest tenth)

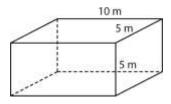
1. What is the circumference of the circle below? Use 3.14 for π .



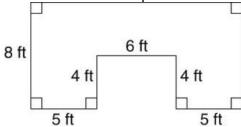
2. What is the area of the circle below? Use 3.14 for π .



3. What is the surface area of the rectangular prism below?



4. What is the area and perimeter of the shape below?



Area _____

Perimeter _____

5. A scale drawing for a rectangular parking lot measures 6 cm by 12 cm. The scale is 5 cm: 25 m. Find the area of the parking lot.