

Name: \_\_\_\_\_

Write all answers on the lines provided.

**Ratios & Unit Rates**

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. You can buy 3 apples at Adam's Apples for \$1.26 or you can buy 5 of the same apples at Fran's Fruit for \$2.05. Which is the better buy ?

\_\_\_\_\_

11. Write the unit rate: \$4.50 for 10 muffins \_\_\_\_\_

12. Write the unit rate: \$12.35 for 13 cans \_\_\_\_\_

### ***Order of Operations***

Evaluate (Show your work)

13.)  $6 - 3 + 1 + 2 \div (5 - 3 + 1) =$  \_\_\_\_\_

14.)  $5 \times 1 + 3^2 - 2$  \_\_\_\_\_

15.)  $8 \times 8 - 8 \div 8$  \_\_\_\_\_

16.)  $2 \div 1 + 2 + 9 \div 9 =$  \_\_\_\_\_

### ***Statistics***

Find the mean, median, mode, and range of the data set: 35, 56, 34, 44, 52, 12, 34, 45

Mean = \_\_\_\_\_ Median = \_\_\_\_\_ Mode = \_\_\_\_\_ Range = \_\_\_\_\_

## Fractions / Decimals / Percents

Write the following as a decimal.

21.) 0.342% \_\_\_\_\_

22.) 1.34% \_\_\_\_\_

23.) 13% \_\_\_\_\_

Write the following as a percent.

24.)  $\frac{9}{20}$  \_\_\_\_\_

25.) 28 \_\_\_\_\_

26.) 0.18 \_\_\_\_\_

Write the following as a fraction

27.) 80% \_\_\_\_\_

28.) 25% \_\_\_\_\_

29.) 0.6 \_\_\_\_\_

30.) 18 is 30% of what number?

\_\_\_\_\_

31.) 63 is 21% of what number?

\_\_\_\_\_

32.) What percent of 80 is 20?

\_\_\_\_\_

33.) What number is 20% of 75?

\_\_\_\_\_

34.) Mary took 20 shots at her basketball game. She made 15 of the shots. What percent did she miss?

\_\_\_\_\_

## Operations with Integers

Simplify each expression. Please circle your answer.

35.) $-34 + (-28)$	36.) $-8 + 8$	37.) $-1 - (-11)$
38.) $-7 \times (-8)$	39.) $15 \div (-3)$	40.) $0 - (-75)$
41.) $-81 \div (-9)$	42.) $12 \times 11$	43.) $18 + (-32)$
44.) $-24 + (-99) + 18$	45.) $-22 + (-40) - (-5)$	46.) $17 - (-5) + 48$

47.) The temperature on a winter night was  $-23^{\circ}\text{F}$ . The temperature **rose** by  $5^{\circ}\text{F}$  when the sun came up. When the sun set again, the temperature **dropped** by  $7^{\circ}\text{F}$ . What was the temperature after the sunset?

48.) Adam is scuba diving. He **descends** 5 feet below sea level. He descends the same distance 4 more times. What is Adam's final elevation?

49.) Volunteers at Brian's school use some of the student council's savings for a special project. They buy 7 backpacks for \$8 each and fill each backpack with pens that cost \$5. By how much did the student council's savings change because of this project?

50.) Amy's score in a video game was changed by  $-75$  points because she missed some targets. She got  $-15$  points for each missed target. How many targets did she miss?