

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. Please write your answers in lowest terms.

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
{The median will be a decimal. All others should be whole numbers.}

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.) 0.02 _____ 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.) 12×11	43.) $18 + (-32)$
44.) $-24 + (-99) + 18$	45.) $-22 + (-40) - (-5)$	46.) $17 - (-5) + 48$

47.) The temperature on a winter night was -23°F . The temperature **rose** by 5°F when the sun came up. When the sun set again, the temperature **dropped** by 7°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 \$12 each and fill each backpack with 2 pens that cost \$1.25 per pen. (They buy 14 pens in total.) The total student council savings before the purchases is \$220.00. What is the balance in the account after the purchase of pens and backpacks?

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?