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. $\dfrac{n}{6} = \dfrac{51}{102}$ _____   5. $\dfrac{2}{4} = \dfrac{8}{c}$ _____

6. $\dfrac{7}{5} = \dfrac{9}{3}$ _____   7. $\dfrac{10}{8} = \dfrac{x}{10}$ _____

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.) 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 x (-8)	39.) 15 ÷ (-3)	40.) 0 - (-75)
41.) -81 ÷ (-9)	42.) 12 x 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 $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?