Express each phrase as a rate and unit rate.
(Round your answer to the nearest hundredth.)

	Rate	Unit Rate

9) 6 calculators cost $180.00   _____   _____

10) 7 pencils for 16 dollars   _____   _____

11) 7 batteries cost 17 dollars   _____   _____

12) 11 inches of snow in 4 hours   _____   _____

Fraction Form OR Decimal Form   P.

Instructions: Write the fraction form and decimal form of each percent.

Example   16%

Fraction Form $\frac{16}{100}$ 0.16   Decimal Form

1   28%   _____ _____

2   41%   _____ _____

3   54%   _____ _____

4   2%   _____ _____

5   4%   _____ _____

6   95%   _____ _____

7   80%   _____ _____

8   164%   _____ _____

9   73%   _____ _____

10   233%   _____ _____

Statistical
Questions

How many days are in March?

How old is your dog?

On average, how old are the dogs that live on this street?

What proportion of the students at your school like watermelons?

Do you like watermelons?

How many bricks are in this wall?

What was the temperature at noon today at City Hall?

L1 - Solving Percent Problems using Proportions Worksheet

Name: _____
Date: _____ Section: _____

REMEMBER:

"OF" number is always behind the word of

"%" number is the number with the percent sign

"IS" number will be in front of the word is
or behind the word is

PROPORTION
$$\frac{is}{of} = \frac{\%}{100}$$

Write a proportion and then solve it for each problem. Be sure to show all the steps for solving a proportion. If necessary, round answers to the nearest tenth.

1. What number is 70% of 45?   1. _____

2. 23% of 75 is what number?   2. _____

3. 45 is what percent of 90?   3. _____

4. What percent of 77 is 7?   4. _____

5. 15 is 25% of what number?   5. _____

6. 18% of what number is 43?   6. _____

Translate Algebraic Expressions

1) 6 is added to one-third of n   _____

2) 6 less than 2 times z   _____

3) Take away 2 from 7 times b   _____

4) 4 times the sum of 7 and b   _____

5) One-third of k is subtracted from 4   _____

6) Add 5 to 9 times q   _____

7) Subtract 2 from 8 times n   _____

8) 9 times the sum of d and 8   _____

9) Subtract five-sixths from 6 times c   _____

10) One-half of the sum of 4 and g   _____

7. Write the following numbers as a percent, fraction, and decimal.

Fraction	Decimal	Percent
$\frac{2}{10}$		
	0.35	
		17%
$\frac{8}{25}$		

Mean, Median, Mode, Range

35, 56, 34, 44, 52, 12, 34, 45 Mean = _____ Median = _____ Mode = _____ Range = _____	
24, 34, 32, 16, 45, 38, 28 Mean = _____ Median = _____ Mode = _____ Range = _____	
86, 24, 65, 65, 24, 24 Mean = _____ Median = _____ Mode = _____ Range = _____	
32, 23, 22, 33, 33, 23, 32, 23, 22 Mean = _____ Median = _____ Mode = _____ Range = _____	

Solve each problem using the percent proportion method.

18. 9 is 15% of what number?	**19.** 24 is what percent of 120?
20. What number is 15% of 80?	**21.** 60 is 75% of what number?
22. 12% of what number is 3?	**23.** 3 is what percent of 60?
24. What percent of 48 is 12?	**25.** 198 is 33% of what number?

Finding Statistical Questions

Name:

Determine if the question posed is a statistical question (yes) or not (no).

1) How tall are the trees in the park?

2) How many hours did you sleep last night?

3) How many brothers does each classmate have?

4) Which football game had the most touchdowns this season?

5) How many cars are in each driveway on your street?

6) How many siblings do you have?

7) How many students passed the math test?

8) How many classmates have a game app on their phone?

9) How many people in the office are wearing ties?

10) How much money did the different classes earn?

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____