

Name _____ Date _____

Unit 2 – Review – Part 2

Find the unit rate.

1) 289 miles on 10 gallons

2) 90 feet in 15 seconds

3) Find the unit rate for the amount of calories per serving.

Servings	2	4	6	8
Calories	240	480	720	960

Indicate AND explain whether or not the ratios form a proportion.

4) $\frac{12}{22}$, $\frac{18}{33}$

5) $\frac{32}{40}$, $\frac{12}{15}$

6) Use the table to write **two** different proportions.

	Concert 1	Concert 2
Songs	15	18
Hours	2.5	h

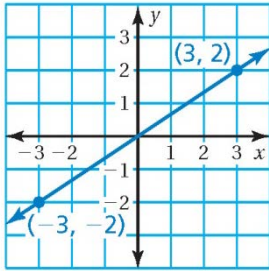
Solve the proportions.

7) $\frac{5}{12} = \frac{y}{15}$

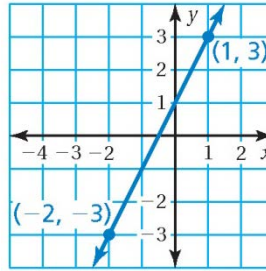
8) $\frac{8}{20} = \frac{6}{w}$

Find the slope of the line.

9)



10)



Tell whether x and y show direct variation. Explain your reasoning.

11) $x + y = 6$

12) $xy = 20$

Write the percent as a decimal.

13) 16%

14) 98.1%

15) 215.4%

Write the decimal as a percent.

16) 0.14

17) 3.54

18) 0.016

19) What is the formula (using the words: “percent”, “part”, and “whole”) for the percent proportion:

_____ = _____

20) What is the formula (using the words: “percent”, “of”, and “is”) for the percent proportion:

_____ = _____

Write and solve a proportion using the **PERCENT PROPORTION**.

21) What percent of 60 is 18?

22) 40 is what percent of 32?

23) What number is 70% of 70?

24) $\frac{3}{4}$ is 75% of what number?

25) What is the formula for the **percent equation**, using the words: “percent”, “part”, and “whole”

26) What is the formula for the **percent equation**, using variables.

Write and solve a proportion using the **PERCENT EQUATION**.

27) 9 is what percent of 20?

28) 91 is 130% of what number?

29) 85% of what number is 10.2?

30) 83% of 20 is what number?

Identify the percent of change as an *increase* or a *decrease*. **Then** find the percent of change. Round to the nearest tenth of a percent if necessary.

31) 6 yards to 36 yards

32) 120 meals to 52 meals

Find the indicated information.

33) Original price: \$130
Discount: 60%

a) What is the amount of discount?

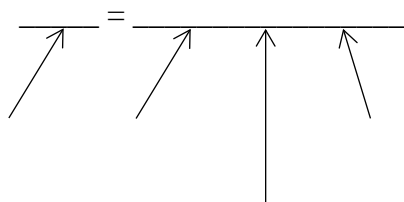
b) What is the sale price?

34) Original price: \$?
Discount: 20%
Sale price: \$75

a) What is the percent that \$75 represents?

b) What is the original price?

35) What is the formula used to help find simple interest? What does each letter stand for?



36) An account earns simple interest. a) Find the interest earned. b) Find the balance of the account.

\$2000 at 3.5% for 4 years

Interest earned = _____

Balance = _____

37) Find the annual simple interest rate.

$I = \$17$, $P = \$500$, $t = 2$ years

38) Find the amount of time.

$I = \$60$, $P = \$400$, $r = 5\%$