

TAKE HOME TEST CHAPTER 5, 6, 7

#1 - 5 Write each of the following ratios as a fraction in lowest terms

8 to 6

250 to 100

$\frac{5}{8}$ to $\frac{3}{8}$

36 to 18

$2\frac{2}{3}$ to $\frac{5}{3}$

#6 to 9 Solve each of the following problems

A car travels 220 miles in 4 hours. What is the rate of the car in miles per hour?

A gas tank which can hold a total of 56 liters contains only 8 liters of gas when the driver stops to refuel. If it takes 4 minutes to fill up the tank, what is the rate in liters per minute?

In 6 hours an airplane travels 4,200 kilometers. What is the rate of the airplane in kilometers per hour?

A 225 gallon drum is filled in 3 minutes. What is the rate in gallons per minute?

#10-15 Solve each of the following equations by dividing both sides by the appropriate number.

$$4 * n = 8$$

$$5 * a = 40$$

$$63 = 7 * y$$

$$3 = 9 * y$$

$$12 * x = 30$$

$$21 = 14 * n$$

#16-19 Find the missing term in each of the following proportions.

$$3/5 = 6/x$$

$$5/9 = x/2$$

$$8/4 = 4/n$$

$$3/7 = x/3$$

Chapter 6

#20- 23 Write each percent as a decimal

23%

7%

3.4%

0.9%

#24-28 Write each decimal as a percent

0.23

0.6

0.62

1.23

0.04

**#29-32 Solve each of the following problems
SHOW YOUR WORK**

What percent of 36 is 9

What number is 15% of 75

10 is 20% of what number

What is 0.4% of 235,671

#33-38 Solve each of the following problems show your work

On a 120 question test a student answered 84 of the questions correctly. What percent of the problems did the student work correctly?

Suppose there are 3,200 students at our school. If 52% of them are female, how many females students are there at our school?

Suppose the sales tax rate in Mississippi is 7% of the purchase price. If a new food processor sells for \$750 how much is the sales tax?

A real estate agent has a commission rate of 3%. If a piece of property sells for \$94,000, what is her commission?

If a person earns \$23,000 a year and gets a 7% increase in salary, what is the new salary?

In one year a new car decreased in value by 20%. If it sold for \$16,500 when it was new, what was it worth after 1 year.

#39 to 40 Solve the problems using the equation

$I = P * R * T$ where t is in years remember there are 360 days in one year for banking purposes.

A woman deposits \$800 in a savings account that pays 5%. If she withdraws all the money in the account after 120 days, how much does she withdraw?

If a loan of \$1,200 at 9% is paid off in 90 days what is the interest?

#41-50 Make the following conversions

5 ft to inches

36 inches to feet

8 pounds to ounces

192 ounces to pounds

3 Tons to ounces

18 pints to quarts

#41-50 Make the following conversions

Convert 86 degrees F to Celsius

Convert 185 degrees C to Fahrenheit

Convert 4 hours 30 minutes to

Minutes

Hours

Convert 5 minutes 20 seconds to

Seconds

minutes