

9-28-18

Aim: SWBAT apply their knowledge of rational numbers to real world applications.

HW: Packet Pages 48 - 51

Review Packet due Wednesday

Test Thursday

Do Now: Correct hw

HOMWORK - DECIMAL OPERATIONS

Evaluate.

1) $4.75 + 8.3 = 13.05$

$$\begin{array}{r} 4.75 \\ + 8.30 \\ \hline 13.05 \end{array}$$

2) $14.13 - 7.255 =$

$$\begin{array}{r} 14.130 \\ - 7.255 \\ \hline 6.875 \end{array}$$

3) $-18.4 + 28.76 = 10.36$

$$\begin{array}{r} 28.76 \\ - 18.40 \\ \hline 10.36 \end{array}$$

4) $-9.2 - 12 = -21.2$

$$\begin{array}{r} 9.2 \\ + 12.0 \\ \hline 21.2 \end{array}$$

5) $(-5.03)(-6.1) = 30.683$

$$\begin{array}{r} 5.03 \\ \times 6.1 \\ \hline 503 \\ + 3018 \\ \hline 30683 \end{array}$$

6) $40.6 \cdot .9 = 36.54$

$$\begin{array}{r} 40.6 \\ \times .9 \\ \hline 36.54 \end{array}$$

7) $-2.1 \cdot .8 = -1.68$

$$\begin{array}{r} 2.1 \\ \times .8 \\ \hline 1.68 \end{array}$$

8) $9.8(-.6) = -5.88$

$$\begin{array}{r} 9.8 \\ \times .6 \\ \hline 5.88 \end{array}$$

7) $-13 \div -0.65 = 20$

$$0.65 \overline{)1300}$$

8) $2.5 \div 0.05 = 50$

$$\begin{array}{r} 20. \\ 65 \overline{)1300} \\ - 1300 \\ \hline 00 \\ - 00 \\ \hline 0 \end{array}$$

9) $0.085 \div -5 = -0.017$

$$\begin{array}{r} 50. \\ 5 \overline{)250} \\ - 250 \\ \hline 00 \\ - 00 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 0.017 \\ 5 \overline{)0.085} \\ - 50 \\ \hline 35 \\ - 35 \\ \hline 0 \end{array}$$

10) Jamie ran 50.28 km in a 4-hour race. What was Jamie's average distance per hour?

$$\begin{array}{r} 12.57 \\ 4 \overline{)50.28} \\ - 40 \\ \hline 10 \\ - 8 \\ \hline 22 \\ - 20 \\ \hline 28 \\ - 28 \\ \hline 0 \end{array}$$

Jamie's average distance was 12.57 km per hour.

HOMEWORK - CHANGING FRACTIONS & DECIMALS TO PERCENTS

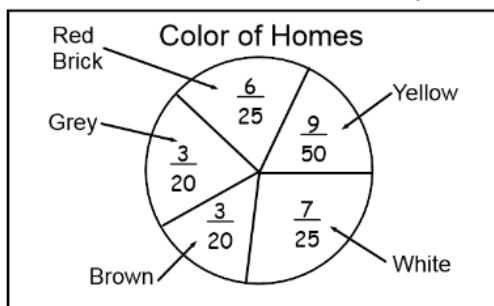
Change each fraction or decimal into a percent. ($\times 100$)

- 1) 0.05 5% 2) 0.24 24% 3) 0.365 36.5% 4) 24.56 2456%
- 5) $\frac{3}{8}$ 37.5% 6) $\frac{43}{50}$ 86% 7) $\frac{23}{10}$ 230% 8) $\frac{50}{80}$ 62.5%

Change each percent into a fraction AND a decimal in SIMPLEST FORM.

PERCENT	FRACTION	DECIMAL
9) 60%	$\frac{3}{5}$	0.6
10) 35%	$\frac{7}{20}$	0.35
11) 18%	$\frac{9}{50}$	0.18
12) 104%	$\frac{26}{25}$	1.04

The circle graph below shows the results of a survey on the colors of homes in a neighborhood.



- 13) What percent of the homes were yellow? 18%
 $\frac{9}{50} \times 100$
- 14) What percent of the homes were either white or gray? 43%
 $\frac{3}{20} + \frac{7}{25} \rightarrow 15\% + 28\%$
- 15) What percent of the homes were not brown? 85%
 $100\% - 15\%$

AIM: SWBAT apply their knowledge of rational numbers to real world applications.

Solving word problems with rational numbers does not have to be difficult. (Remember, RATIONAL NUMBERS INCLUDE integers, fractions, mixed numbers, and terminating decimals and repeating decimals.) First, you will need to remember all of your rules for adding, subtracting, multiplying, and dividing rational numbers.

The other important skill is READING . . . yes you will have to read in math class. You will need to look for key words in each word problem to help you decide which operation you will need to use. For example, "How many miles do they have left?" would indicate subtraction. You should underline or highlight these key words in the word problem to help you.

CLASSWORK: (Finish for Homework—Be sure to write a numerical expression and evaluate.)

- 1) Joe's apple weighs $\frac{4}{5}$ lb. Marta's apple weighs 0.6 lb. How much more does Joe's apple weigh than Marta's?

$$\frac{4}{5} - 0.6$$

$$0.2$$

no equal signs
Joe's apple weighs
0.2 lbs more.

- 2) At 2:30 A.M. the temperature in Alaska is -5°F . Over the next hour the temperature drops $1\frac{3}{4}$ of a degree. What is the temperature at 3:30 A.M.?

$$-5 - 1\frac{3}{4}$$

$$-6\frac{3}{4}$$

The temp. is $6\frac{3}{4}^{\circ}\text{F}$
below zero.

- 3) Rebecca's bank statement shows a deduction of \$1.50 taken out of her account each week. How many weeks will it take before the total deduction is \$12?

$$12 \div 1.50$$

$$8$$

It will take
8 weeks.

- 4) The depth of a small submarine changes by $-\frac{3}{8}$ mile after each exploration. After how many explorations will the submarine's depth have changed by -1.5 miles?

"number sentence"

$$-1.5 \div -\frac{3}{8} = x$$

$$4 = x$$

VS.

Expression

$$-1.5 \div -\frac{3}{8}$$

$$4$$

- 5) The amount of shore at a local beach changes an average of $-\frac{3}{4}$ foot each year. What is the change in the amount of shore after 7.75 years?

- 6) Mitch is cutting a piece of fabric that is $4\frac{4}{5}$ feet long into smaller strips that are 0.8 feet long. How many strips will Mitch have when he is done?

- 7) A birdbath is filled to the top. On Day 1, the volume of water in the bowl decreases by $\frac{7}{8}$ cup. On Day 2, the volume of water in the bowl decreases by 0.75 cup. What is the total change in the volume of water in the bowl after two days?

8) At midnight, the temperature in Alto is -3.8°F . The wind chill makes the temperature feel $5\frac{3}{5}^{\circ}\text{F}$ colder than the actual temperature. What is the wind chill temperature?

9) Browning, Montana, holds the U.S. record for the greatest temperature drop in one day. On January 23, 1916, the temperature changed by an average of -4.17°F per hour. **To the nearest degree**, what was the total temperature change after 24 hours?

10) Beth plays a video game in which she starts with 0 points. In round 1, she loses $3\frac{1}{2}$ points; in round 2, she wins 28.5 points; and in round 3, she loses another $3\frac{1}{5}$ points. What is her final score?

11) Paige regularly babysits the 3 neighbor children. She gets paid \$4.50 per hour for each child.

Part A - Paige babysat the neighbor children for 3 hours. How much money did she earn?

Part B - Paige was asked if she was available next week to babysit all 3 children for 8 hours. Paige decided to have a friend help her and will give her half the earnings. How much will Paige and her friend each earn?

Part C - The neighbors are having another child. Paige wants to ask for \$0.75 raise per child per hour. If she gets the raise, how much more will she earn watching 4 children at her new rate than watching 3 children at her old rate for 3 hours?