Name_____
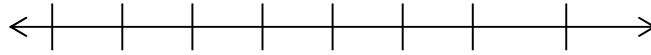
2nd and 5th hour homework 4/26-5/1/16 DUE MONDAY 5/2/16

1) Place these numbers on the number line: -1/2, -2, 4, -3, 1½, -1

$$\longleftarrow | \quad | \quad | \quad | \quad | \quad | \quad | \quad | \longrightarrow$$

Solve the following fraction problems and put your answer in _simplest form_.

2) $\dfrac{2}{5} \div \dfrac{3}{7}$ 3) $\dfrac{3}{4} - \dfrac{1}{8}$ 4) $\dfrac{4}{7} \times \dfrac{5}{8}$ 5) $2\frac{1}{2} + 5\frac{2}{3}$

Solve the following

6) What number is 5 more than negative 2?   7) What number is 4 less than 2?

Solve the following proportions

8) $\dfrac{2}{3} = \dfrac{m}{12}$ 9) $\dfrac{6}{4} = \dfrac{15}{y}$ 10) $5 : 7 = 10 : m$

Arrange the following in order from _least to greatest_

11) 135.1, .6510, 5.712, 1.342   12) 7.12, .7210, 17.021, .701

Solve the following integer problems

13) $36 \div (-4)$ 14) $-9 - (-6)$ 15) $(8)(2)(-2)$ 16) $6 + (-8)$

17) On Sunday the low temperature was -9°F. On Monday the low temperature rose 12°F. What was the low temperature on Monday?

18) You are in your submarine at 45 feet below sea level and you dive down another 57 feet. How many feet did you dive down all together?

Use these steps to Solve the following *percent* problems.

EXAMPLE #2:

3 is what percent of 4?

3 appears with the word *is*: It's the PART and goes on top.
4 appears with the word *of*: It's the WHOLE and goes on the bottom.

$$\frac{3}{4} = \frac{percent}{100}$$

We're trying to find the missing PERCENT (out of the *whole* 100%).

In a proportion the cross-products are equal: So 3 times 100 is equal to 4 times the PERCENT.

The missing PERCENT equals 100 times 3 divided by 4.

(Multiply the two opposite corners with numbers; then divide by the other number.)

3 times 100 = 4 times *the percent*
300 = 4 times *the percent*
300/4 = 4/4 times *the percent*
75 = *the percent*

$$\frac{3}{④} = \frac{}{100}$$

EXAMPLE #3:

75% of what number is 3? (*or* 3 is 75% of what number?)

The PERCENT *always* goes over 100.
(It's a part of the whole 100%.)
3 appears with the word *is*:
It's the PART and goes on the top.

$$\frac{3}{whole} = \frac{75}{100}$$

We're trying to find the missing WHOLE (on the bottom).

In a proportion the cross-products are equal: So 3 times 100 is equal to 75 times the WHOLE.

The missing WHOLE equals 3 times 100 divided by 75.

(Multiply the two opposite corners with numbers; then divide by the other number.)

3 times 100 = 75 times *the whole*
300 = 75 times *the whole*
300/75 = 75/75 times *the whole*
4 = *the whole*

$$\frac{3}{} = \frac{⑦⑤}{100}$$

19) Mr. Velk has to write a 500 word essay. He has already written 235 words, what % of the essay did he write?

20) The shirt you want is $65 but it's on sale for 35% off. Find the amount of the discount and the sales price.

21) You are taking your favorite math and science teacher to lunch and the bill came to $24. If you tip the waiter 12% of the bill (service wasn't that good☹), how much will the bill be?