

October 24-28, 2011

ALGEBRA

- Monday, October 24, 2011
- SW learn to solve equations involving absolute value

- 1. Complete review quiz
- 2. Students will work through examples solving absolute value equations with one, two, or no solutions.
- 3. Complete class work assignment with a partner
- 4. Begin homework

- Solving Equations Involving Absolute Value
- Terms that should be in your notes.

- Absolute Value:** no solution, 1 solution, or 2 solutions.
Abs Value always equals a positive
- Empty Set:** \emptyset or $\{\}$

* Steps:

- Add/Subtract any number outside the absolute value bars
- Write a compound sentence - 2 equations
 - take away abs value bars
 - keep equation the same
 - make 1 equal to a positive & the other equal to a negative

* Solve.

$$1. |d-4|=3 \quad \begin{array}{l} d-4=3 \\ +4 \quad +4 \\ \hline d=7 \end{array} \quad \text{or} \quad \begin{array}{l} d-4=-3 \\ +4 \quad +4 \\ \hline d=1 \end{array}$$

$$\{7, 1\}$$

$$2. |g+3|-\frac{1}{2}=6 \quad \begin{array}{l} g+\frac{1}{2}=8 \\ -\frac{1}{2} \quad -3 \\ \hline g=5 \end{array} \quad \text{or} \quad \begin{array}{l} g+\frac{1}{2}=-8 \\ -\frac{1}{2} \quad -\frac{1}{2} \\ \hline g=-11 \end{array}$$

$$\rightarrow |g+3|=8 \quad g=5 \quad \{5, -11\}$$

$$3. |y+5|-\frac{1}{2}=-7 \quad \emptyset \quad \{\}$$

$$\rightarrow |y+5|=-5$$

Anytime what is abs value bars = a negative, the answer is empty set.

$$4. |a-3|+\frac{1}{2}=-4 \quad \{\} \text{ or } \emptyset$$

$$\begin{array}{l} -\frac{1}{2} \quad -2 \\ \hline |a-3|=-6 \end{array}$$

Whenever it equals zero, you have one solution

$$5. |h-7|=0 \quad \{7\}$$

$$\begin{array}{l} h-7=0 \\ +7 \quad +7 \\ \hline h=7 \end{array} \quad \text{or} \quad \cancel{h-7=0}$$

6. Write an equation to represent the situation. The distance between a number x and -4 is 10 units.

$$|x-(-4)|=10$$

$$|x+4|=10$$

- Class work: Page 130-131; 1-11 all, not #2

- Homework: Page 131; 14-32 every third
Read and take notes on pages 140-143

* Tuesday, October 25, 2011

* SW learn to multiply rational numbers

- * 1. Complete review quiz
- * 2. Students will work through examples multiplying decimals and fractions, using both positive and negative numbers.
- * 3. Complete class work assignment with a partner
- * 4. Begin homework

* Lesson 4-1: Multiplying Rational Numbers
 * Terms that should be defined in your notes:
 * Multiplication Property of -1:

* Closure Property of Rational Numbers:

* Find each product.

1) Just multiply
 2) Determine where decimals goes
 3) Determine sign

1) $-5(-13)$

2) $-2.4(7.5)$

$$\begin{array}{r} 2 \\ 7.5 \\ \underline{2.4} \\ 300 \\ \underline{1500} \\ 1800 \end{array} \quad -18$$

3) $8 \cdot (-3.2)$

$$\begin{array}{r} 1 \\ 3.2 \\ \underline{8} \\ 256 \end{array} \quad \begin{array}{r} 8 \\ 32 \\ \hline 256 \end{array} \quad -25.6$$

1) Multiply the numerator
 2) Multiply the denominators
 3) Simplify
 4) Determine the sign

4) $\frac{3}{4} \left(\frac{5}{7} \right) = + \frac{15}{28}$

5) $\frac{4}{5} \cdot \left(-\frac{3}{1} \right) = -\frac{12}{5}$

$-2\frac{2}{5}$

When you have a whole
 How do you make it a
 fraction? Put over 1

6) $-\frac{1}{2} \left(-1\frac{3}{8} \right)$

$-\frac{1}{2} \left(-\frac{11}{8} \right) = +\frac{11}{16}$

Mixed numbers - make
 into an improper
 fraction
 Whole number \times denominator
 + numerator

Algebraic: Decimals & Fractions solve
 the same & put variables
 at the end

7) $2x(-4.5y)$

$$\frac{4.5}{2} \quad -9.0xy \quad \text{or} \quad -9xy$$

8) $\frac{5}{7}g \left(\frac{2}{3}h \right) = \frac{10}{21}gh$

9) Teri wants to buy a bicycle with the money she earns from
 her after-school job. If she can save \$22.50 a week, how
 much money will she have after six weeks?

$$22.50 \times 6 = \$135.00$$

$$\begin{array}{r} 22.50 \\ \times 6 \\ \hline 135.00 \end{array}$$

* Class Work: Page 144; 4-16 even

* Homework: Page 144-145; 18-42 every third; 46

- × Wednesday, October 26, 2011
- × SW review various concepts for tomorrow's test on Lessons 3-3, 3-4, 3-6, 3-7, and 4-1
- × 1. Complete review quiz
- × 2. Working with a partner complete the following assignment in class. Make sure to ask for assistance to clarify any concepts you don't understand.
 - + Page 133-134; 23-31 odd, 45-53 odd/Page 180; 11-17 odd
- × 3. Begin Homework: Page 133-134; 24-30 even, 40-54 even odd/Page 180; 12-16 even
Study!!!

- × Thursday, October 27, 2011
- × SW have the entire class period to complete Test 4.
- × Bonus question #1: about #32.50 should say \$ 32.50
- × Hand in notebooks for notebook grade!
- × Homework: Page 139; 1-33 odd
Read and take notes on pages 146-148

ENJOY YOUR 4 DAY
WEEKEND
SEE YOU NOVEMBER 1.

