

October 24-28, 2011

**PRE - ALGEBRA**

\* Monday, October 24, 2011

\* SW solve two-step equations

- \* 1. Complete review quiz
- \* 2. Review student notes and work through examples solving algebraic expressions involving two-steps.
- \* 3. Complete class work assignment with a partner
- \* 4. Begin homework

\* Solving Two-Step Equations

\* Two-step equation: Contains 2 mathematical operations

\* Steps: Goal: Get the variable by itself

1) Undo addition or subtraction

- Add/Subt the number on the same side as the variable

2) Undo multiplication or division

- Mult/Div by the number attached to the variable

\* Solve each equation.

$$1. \begin{array}{r} 6x + 7 = 25 \\ -7 \quad -7 \\ \hline 6x = 24 \end{array} \quad \begin{array}{r} 6x = 24 \\ \hline 6 \quad 6 \end{array} \quad x = 4$$

$$2. \begin{array}{r} 19 = 9 - y \\ -9 \quad -9 \\ \hline 10 = -y \end{array} \quad \begin{array}{r} -1y = 10 \\ \hline -1 \quad -1 \end{array} \quad y = -10$$

$$3. \begin{array}{r} 35 - k = 21 \\ -35 \quad -35 \\ \hline -k = -14 \end{array} \quad \begin{array}{r} -k = -14 \\ \hline -1 \quad -1 \end{array} \quad k = 14$$

Simplify by combining like terms

4.  $4 - 9d + 3d = 58$

$$\begin{array}{r} 4 - 6d = 58 \\ -4 \quad -4 \\ \hline -6d = 54 \end{array}$$

$$\begin{array}{r} -6d = 54 \\ \hline -6 \quad -6 \end{array} \quad d = -9$$

5.  $34 = 4m - 2 + 2m$

$$\begin{array}{r} 34 = 6m - 2 \\ + 2 \quad + 2 \\ \hline 36 = 6m \end{array}$$

$$\begin{array}{r} 36 = 6m \\ \hline 6 \quad 6 \end{array} \quad m = 6$$

6.  $\frac{n}{3} + 15 = 8$

$$\begin{array}{r} \frac{n}{3} + 15 = 8 \\ -15 \quad -15 \\ \hline \frac{n}{3} = -7 \end{array}$$

$$\begin{array}{r} \frac{n}{3} = -7(3) \\ \hline \frac{n}{3} = -21 \end{array}$$

\* Salvatore purchased a computer for \$545. He paid \$105 initially, and then he will pay \$20 per month until the computer is paid off. Solve  $105 + 20x = 545$  to find how many payments he will make.

$$\begin{array}{r} 105 + 20x = 545 \\ -105 \quad -105 \\ \hline 20x = 440 \end{array} \quad \begin{array}{r} 20x = 440 \\ \hline 20 \quad 20 \end{array} \quad x = 22$$

\* In nine visits to the styling salon, Andre had spent \$169 for haircuts. Of that amount, \$16 was in tips. Write and solve an equation to find how much Andre pays for each haircut before the tip.

$$\begin{array}{l} \text{Total: } 169 \\ \text{Tips: } 16 \\ \text{Visits: } 9 \\ \text{Per haircut: } h \end{array} \quad \begin{array}{r} 9h + 16 = 169 \\ -16 \quad -16 \\ \hline 9h = 153 \\ \hline \frac{9h}{9} = \frac{153}{9} \\ h = 17 \end{array}$$

- \* Class work: Page 149; 1-10 all
- \* Homework: Page 150; 12-42 every third, 44-48 even  
Read and take notes on pages 153-155

- \* Tuesday, October 25, 2011
- \* SW write verbal sentences as two-step equations and solve verbal problems by writing and solving two-step equations.
- \* 1. Complete review quiz
- \* 2. Review student notes and work through examples how to translate sentences into equations and then solve those equations.
- \* 3. Complete class work assignment with a partner
- \* 4. Begin homework

- \* Lesson 3-4: Writing Two-Step Equations
- \* Terms that should be defined in your notes:
- \* Expression:

Then, you reverse the order of the equation

- \* Translate each sentence into an equation.

1. Four more than three times a number is -26

$$3n + 4 = -26$$

2. Twenty-four is 6 less than twice a number.

$$24 = 2n - 6$$

3. The quotient of a number and 7, increased by 6, is equal to 12.

$$\frac{n}{7} + 6 = 12$$

- \* Translate and Solve an Equation

4. Eight less than three times a number is -23.

$$\begin{array}{r} 3n - 8 = -23 \\ +8 \quad +8 \\ \hline 3n = -15 \end{array} \quad \begin{array}{r} 3n = -15 \\ \div 3 \quad \div 3 \\ \hline n = -5 \end{array}$$

5. Nine more than four times a number is 41.

$$\begin{array}{r} 4n + 9 = 41 \\ -9 \quad -9 \\ \hline 4n = 32 \end{array} \quad \begin{array}{r} 4n = 32 \\ \div 4 \quad \div 4 \\ \hline n = 8 \end{array}$$

6. When 5 is added to the product of a number and 8, the result is 12.

$$\begin{array}{r} 8n + 5 = 12 \\ -5 \quad -5 \\ \hline 8n = 7 \end{array} \quad \begin{array}{r} 8n = 7 \\ \div 8 \quad \div 8 \\ \hline n = \frac{7}{8} \end{array}$$

- \* Word Problems.

7. Jasmine bought 6 CD's, all at the same price. The tax on her purchase was \$7, and the total was \$73. What was the price of each CD?

$$\begin{array}{r} \# \text{ CD's} = 6 \\ \text{Tax} = 7 \\ \text{Total} = 73 \\ \text{CD} = p \end{array} \quad \begin{array}{r} 6p + 7 = 73 \\ -7 \quad -7 \\ \hline 6p = 66 \\ \div 6 \quad \div 6 \\ \hline p = 11 \end{array}$$

8. Henry is building a front door. The height of the door is 1 foot more than twice its width. If the door is 7 feet high, what is its width.

$$\begin{array}{l} \text{Tot Door Height} = 7 \\ \text{width} = w \\ \text{Height} = 2w + 1 \end{array} \quad \begin{array}{r} 2w + 1 = 7 \\ -1 \quad -1 \\ \hline 2w = 6 \\ \div 2 \quad \div 2 \\ \hline w = 3 \text{ft.} \end{array}$$

- \* Class work: Page 155; 1-5 all
- \* Homework: Page 155-156; 6-20 even

$$\begin{aligned} \$5 \quad \text{Total} &= 37 \\ \text{Cde} &= c \\ \text{Lawana} &= c+5 \\ c+c+5 &= 37 \\ 2c+5 &= 37 \end{aligned}$$

- \* Wednesday, October 26, 2011
- \* SW review various concepts for tomorrow's test on Lessons 3-2 through 3-6
- \* 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 170-171; 16-42 even
- \* 3. Begin Homework: Page 170-171; 17-41 odd  
Study!!!

- \* Thursday, October 27, 2011
- \* SW have the entire class period to complete Test 4.
- \* Bonus questions #3: Write an equation should say  
\* Write an equation
- \* Hand in notebooks for notebook grade!
- \* Homework: Page 766-767; Lesson 3-5; 13-21 all  
Lesson 3-6; 1-9 odd  
Read and take notes on pages 158-159

**ENJOY YOUR 4 DAY  
WEEKEND  
SEE YOU NOVEMBER 1.**

