Name:_____ Date:_____

Notes
Algebra Section 3.1
Pages 134-140

Goal: "You will solve one-step equations"

Vocabulary:

Inverse Operations: Two _____ that _____ each other.

Examples: _____ and _____

_____ and _____

_____ and _____

Key Concepts:

To solve an equation you must _____ the _____.

Whatever you do to _____ _____ of the equation _____

_____.

You must _____ all your _____!!!

Addition and Subtraction:

Examples: $x + 8 = 11$ Check $x - 10 = 15$ Check

Try These:

Ex: $x + 7 = 4$ ***Ex***: $x - 12 = 3$ ***Ex***: $x - 19 = 5$ ***Ex***: $x + 4 = 15$

Ex: $x + 5 = -4$ ***Ex***: $x - 12 = -3$ ***Ex***: $12 + x = -15$ ***Ex***: $x - 10 = -45$

Ex: $x + 6 = -9$ ***Ex***: $x - 2 = -12$ ***Ex***: $9 + x = -1$ ***Ex***: $x - 11 = -4$

Ex: $x + 2 = -6$ ***Ex***: $x - 3 = -2$ ***Ex***: $12 + x = -15$ ***Ex***: $x - 38 = -16$

Multiplication and Division:

Examples:

$3x = 18$ $\frac{x}{8} = 10$ $\frac{3}{5}x = 9$ $-x = 3$

Try These:

Ex: $-6x = 48$ **Ex:** $\frac{x}{-4} = -7$ **Ex:** $-3x = -9$

Ex: $2w = 10$ **Ex:** $\frac{p}{3} = 14$ **Ex:** $9 = -2n$

Ex: $8 = \frac{4}{5}v$ **Ex:** $9x = 3$ **Ex:** $-x = 2$

Word Problems: (Write an equation and then solve)

Ex: In the 2004 Olympics, Shawn Crawford won the 200 meter dash. His winning time was 19.79 seconds. Find his average speed to the nearest tenth of a meter per second.

Ex: What if Crawford ran the 100 meter dash at the same speed as the 200? How long would it take him to run it?

Ex: In the 2004 Olympics, Inge de Brujin won the 50-meter freestyle with a time of 24.58 seconds. What was her average speed?