

Watch the videos and take notes on this page

Due at the Beginning of Next Class

### Section 2.5 Solving One-Step Equations

**Solving** an equation means finding the value that makes the equation \_\_\_\_\_. We write the **solution set** in set brackets.

#### Equations with Addition and Subtraction

1. Find the missing value.

a.  $x + 3 = 7$

b.  $6 = x + 1$

#### Opposite Operations

2. Solve the following equations, showing your operations. State the solution set and check your answer.

a.  $x - 4 = 1$

b.  $6 = -4 + x$

c.  $z - (-2) = -7$

d.  $-\frac{1}{2} = x - \frac{3}{4}$

## Equations with Multiplication and Division

3. Find the missing value.

a.  $3x = 6$

b.  $2 = 2t$

## Opposite Operations

4. Solve the following equations, showing your operations. State the solution set and check your answer.

a.  $3p = -6$

b.  $-z = 28$

c.  $\frac{3}{4}x = 10$

d.  $\frac{x}{7} = 3$

## **Section 2.6 Solving One-Step Inequalities**

5. Do the opposite operations also work with inequalities? Let's do a test:

**Add a number to each side**

**Subtract a number from each side**

**Multiply each side by a positive number**

**Multiply each side by a negative number**

**Summary for solving inequalities:**

6. Solve each inequality and graph each solution on a number line. Write the solution set in interval and set-builder notation.

Solve the Inequality	Number Line Graph	Interval	Set-builder Notation
a. $x+3>9$			
b. $t-6\leq 8$			
c. $6>\frac{2}{7}x$			
d. $-3x\geq -21$			