

## 3.1: Getting Ready and Solving Equations I

### Warm Up – Getting Ready

Find the value that makes the equation true:

1.  $-q = 3$

2.  $y + 7 = -2$

Write the word equation as an algebraic equation.

The product of five and three more than a number equals twelve.

### Skill 1: Inverse Operations – Adding/Subtracting

When solving equations, we need to ISOLATE the variable. We do this by getting the variable by itself.

In the following equations, do the INVERSE or OPPOSITE operation to isolate the variable:

### Example

$$X + 4 = 9$$

### Steps

1) Collect all your variables on the left hand side and all the numbers on the right hand side of the equation.

2) Perform the inverse operation to move the number to the right hand side of the equation

3) Simplify the right hand side of the equation

### Examples

1. Find the value of the variable:

a)  $x + 6 = -7$

b)  $x - 10 = -4$

c)  $-10 = y + 18$

d)  $-15 = y + 4$

**Homework:** p.281 #1-4, 7, p. 294 #1