**3.1: Solve One-Step Equations**

**Goals:** \*Solve equations using addition and subtraction

 \*Solve equations using multiplication and division

 **\***Solve equations involving fractions and reciprocals

 **\***Check answers

**Inverse Operations:**

**Properties of Equality:**

**To Solve an Equation You Need To:**

**\*\*GOLDEN RULE OF EQUATION SOLVING\*\***

**Solve each equation. Show all work.**

**Ex:** *x* + 7 = 4 **Ex:** *x* – 12 = 3 **Ex:** 19 – *x* = 5

**Ex:** –*x* + 4 = 15 **Ex:** –6*x* = 48 **Ex:** $\frac{x}{-4}=-7$

**Ex:** $-\frac{2}{7}x=4$ **Ex:**  $\frac{5}{6}w=10$ **Ex:** $\frac{2}{3}p=14$

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

**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?