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: $-6x = 48$

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:** $9x = 3$

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?

Ex. You are traveling 250 miles to your friend's house. It takes you 5 hours to get there. What was your average speed?

Ex. You are traveling 150 miles to your cousin's house. You travel at a rate of 50 miles per hour. When will you get to your cousin's house?