

Solving a Linear Equation in One Variable



Preliminaries and Objectives

Preliminaries

- Distributing
- Combining Like Terms

Objectives

- Solve a linear equation

Example 1

$$7 - 3(4 - 2x) = 8x - 11$$

$$7 - 12 + 6x = 8x - 11$$

$$-5 + 6x = 8x - 11$$

$$\quad -6x \quad -6x$$

$$\quad -5 = 2x - 11$$

$$\quad +11 \quad +11$$

$$6 = 2x$$

$$3 = x$$

Recap

To solve a linear equation in one variable

- Distribute
- Combine like terms
- Eliminate the variable from one side of the equation
- Eliminate the constant from the other side of the equation
- Divide by the coefficient on the variable