Solving a Linear Equation in One Variable
Preliminaries and Objectives

Preliminaries
- Distributing
- Combining Like Terms

Objectives
- Solve a linear equation
Example 1

\[ 7 - 3(4 - 2x) = 8x - 11 \]
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\[ 7 - 12 + 6x = 8x - 11 \]
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\[-5 + 6x = 8x - 11\]
\[-6x \quad -6x\]
\[\underline{-5} = 2x - 11\]
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$$6 = 2x$$
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\[ 7 - 12 + 6x = 8x - 11 \]
\[ -5 + 6x = 8x - 11 \]
\[ -6x \quad -6x \]
\[ -5 = 2x - 11 \]
\[ +11 \quad +11 \]
\[ 6 = 2x \]
\[ 3 = x \]
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