

## Section 11.2

### Solving 1 Step Equations That look like $x + a = b$

**'Solve an Equation'** : means to find the **value** of the **variable**.

#### **3 methods to solve an equation**

- Inspection (guess and check).
- Model the equation on a scale and balance the **values**.
- **Isolate** the **variable** by performing the opposite operation on both sides of the **equation**.

**Method 1: Inspection (guess and check)**

$j + 6 = 16$	$23 - t = 11$	$17 = x - 9$
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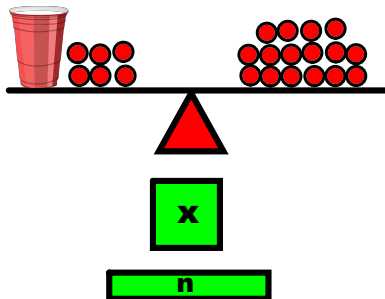
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**Method 2: Model on Scale and Balance**

$j + 6 = 16$



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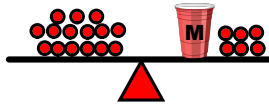
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**Method 2: Advanced**

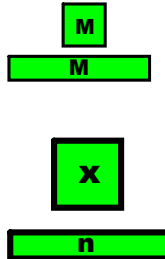
John scored 15 goals in a soccer season. This was 6 more goals than his friend Matt. How many goals did Matt score?

Write the Equation

Model It on a scale



How many goals did Matt score?



Method 3: **Isolate** The **Variable** By Performing The Opposite Operation

$$C + 32 = 55$$

Check Using Substitution

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**Method 3: Advanced**

Mike scored 22 goals on his hockey team. This was 15 goals less than his teammate Jeff. How many goals did Jeff score?

**Write the equation**

**Solve the equation**

**Check using substitution**

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**Key Ideas**

Solve an Equation means you need to find the value of the variable.

You can solve an equation using 3 methods.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

Check your answers using substitution.

If **Left Side = Right Side** .....means you did it right