Section 11.3

Solving 1 Step Equations That look like

$$ax = b \qquad \frac{x}{a} = b$$

'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)

Solve the following equations.

$$5c = 20 \qquad\qquad \frac{x}{4} = 5$$

Method 2: Model on a Scale and Balance

Solve the following equations.

$$5c = 20 \qquad\qquad \frac{x}{4} = 5$$

Method 3: <mark>Isolate</mark> The <mark>Variable</mark> By Performing The
Opposite Operation

$5c = 20$ $\dfrac{x}{4} = 5$ $24 = 4x$ $4 = \dfrac{x}{3}$

Word Problems

Tyler and Murray earn money delivering pizza. Last weekend, Murray
earned $56. This was one third of the amount that Tyler earned. How
much money did Tyler earn?

Always identify your variable first!

Then make your equation

Check using substitution

3

Word Problems

Majid is saving for a ski trip that costs $525. He needs to triple his savings before he has enough money for the trip. How much money has Derek saved so far?

Always identify your variable first!

Then make your equation

Check using substitution

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Word Problems

A man rides his bike at 200 m/min. If he rides his bike from home to school, a distance of 3000m, how long will it take him to get school?

Always identify your variable first!

Then make your equation

Check using substitution

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