$3x + 4 = 19$
$-4 \quad -4$
$\frac{3x}{3} = \frac{15}{3}$
$x = 5$

$x - 4 = 8$
$+4 \quad +4$
$x = 12$

Lesson 4: Solving a Linear Equation

Solving equations ★ get in to $x = ?$ Form

Classwork

Exercises

For each problem, show your work, and check that your solution is correct.

1. Solve the linear equation $x + x + 2 + x + 4 + x + 6 = -28$. State the property that justifies your first step and why you chose it.

We will use the comm prop. of addition to rearrange the equation

$4x + 1x + 1x + 1x + 2 + 4 + 6 = -28$
$4x + 12 = -28$
$-12 \quad -12$
$\frac{4x}{4} = \frac{-40}{4}$
$x = -10$

2. Solve the linear equation $2(3x + 2) = 2x - 1 + x$. State the property that justifies your first step and why you chose it.

Dist prop. of Mult.

$6x + 4 = 2x - 1 + x$
$6x + 4 = 3x - 1$
$-4 \quad -4$
$6x = 3x - 5$
$-3x \quad -3x$
$\frac{3x}{3} = \frac{-5}{3}$
$x = -\frac{5}{3}$