LINEAR EQUATIONS IN ONE VARIABLE

To **solve** a linear equation in one variable is to find the value of the variable that will make the equation true.

Example 1

Solve:

(a) $5x - 3 = 2x + 9$

(b) $5(x - 3) - 3(x - 2) = 19$

Solution

(a) $5x - 3 = 2x + 9$

$5x - 3 - 2x = 9$

$3x - 3 = 9$

$3x = 12$

$x = 4$

(b) $5(x - 3) - 3(x - 2) = 19$

$5x - 15 - 3x + 6 = 19$

$2x - 9 = 19$

$2x = 28$

$x = 14$