5.12

# Solving Equations by Factoring

## Introduction

Solve for *x* for the following:

1) $5 \bullet x = 0$

2) $x - 3 = 0$

3) $2x - 5 = 0$

## Which one can be equal to zero?

$$a \times b = 0$$

## Solve

1) $\underbrace{(x-1)}_{0}\underbrace{(x+3)}_{0} = 0$

To see if these are correct, you can simply plug these solutions back into the problem to see if it works.

## Solve

2) $\underbrace{3n}_{0}\underbrace{(n-2)}_{0}\underbrace{(n-5)}_{0} = 0$

## Solve

3) $\underbrace{(5n-2)}_{0}\underbrace{(3n-4)}_{0} = 0$

Solve

4) $2x^2 + 5x - 12 = 0$

Solve

5) $2x^2 - x = 3$

Solve

6) $18y^3 + 66y^2 - 24y = 0$

Solve

7) $5a^2 = 80$