Name _____   Date _____

Solving Quadratic Equations By Factoring - Step-by-Step Lesson

Solve. Write your answers as integers or as proper or improper fractions in simplest form.

$x^2 - 36x = 0$

Explanation:

We will solve by factorization.

$x^2 - 36x = 0$

$x(x - 36) = 0$ pull and x from the left side by factoring.

We know that the Zero Product Property states that for all real numbers a and b:

If $ab = 0$, then $a = 0$ or $b = 0$

According to the Zero Product Property, if $x(x - 36) = 0$, then x must be 0 or $x - 36$ must be 0. Now we will write two equations and solve x.

$x = 0$ or $x - 36 = 0$

                 or $x = 36$