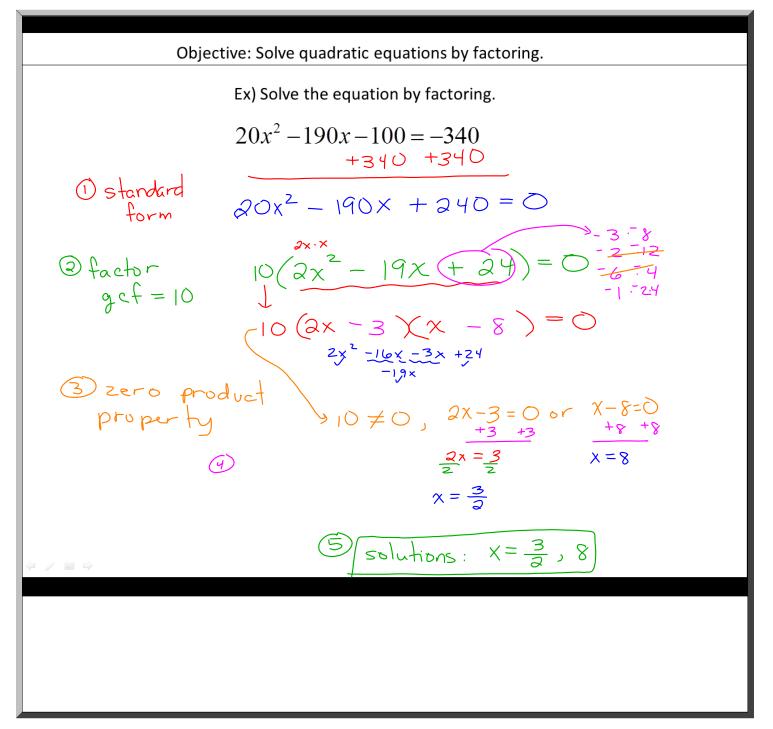
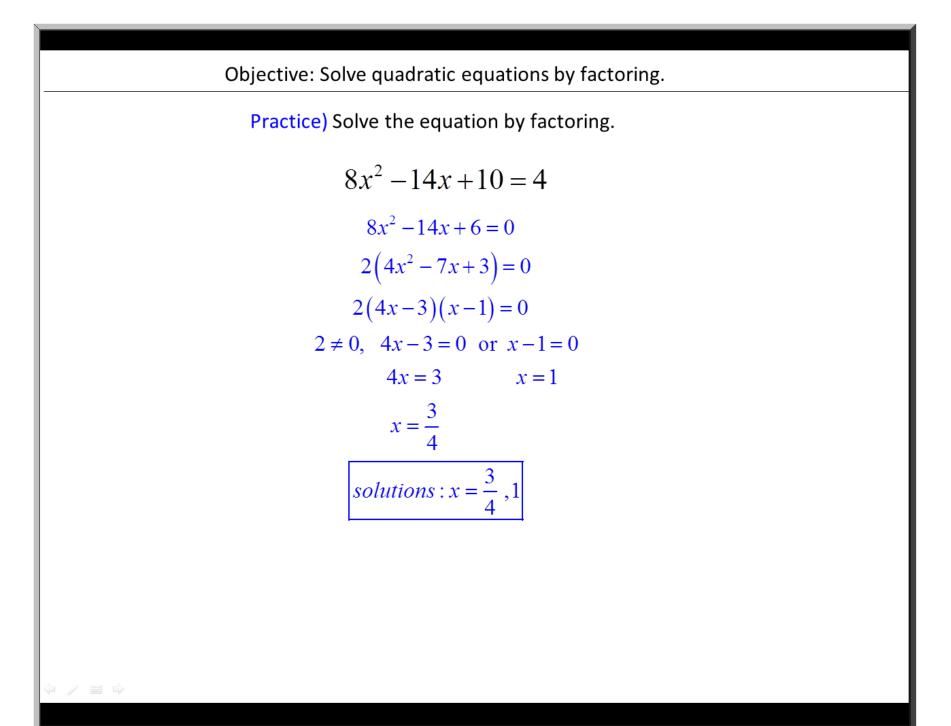
## Objective: Solve quadratic equations by factoring. Concept Steps to Solve a Quadratic Equation by Factoring 1. Write the equation is standard form, $ax^2 + bx + c = 0$ . 2. Factor the polynomial completely, including any greatest common factor. 3. Use the Zero Product Property. 4. Solve for the values of the variable, x. 5. State the solution.

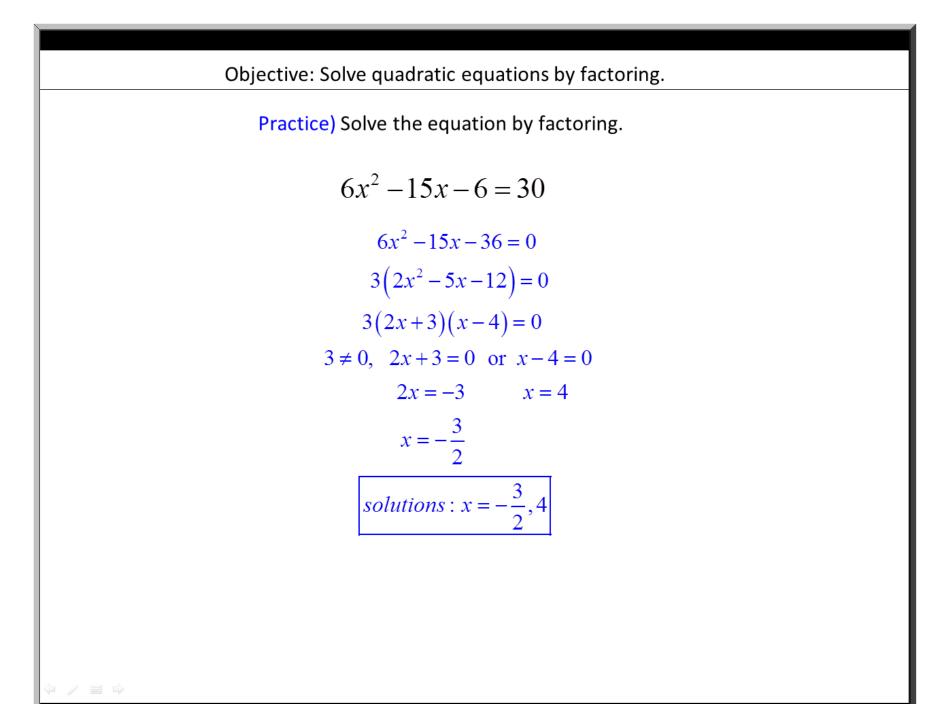
## Zero Product Property

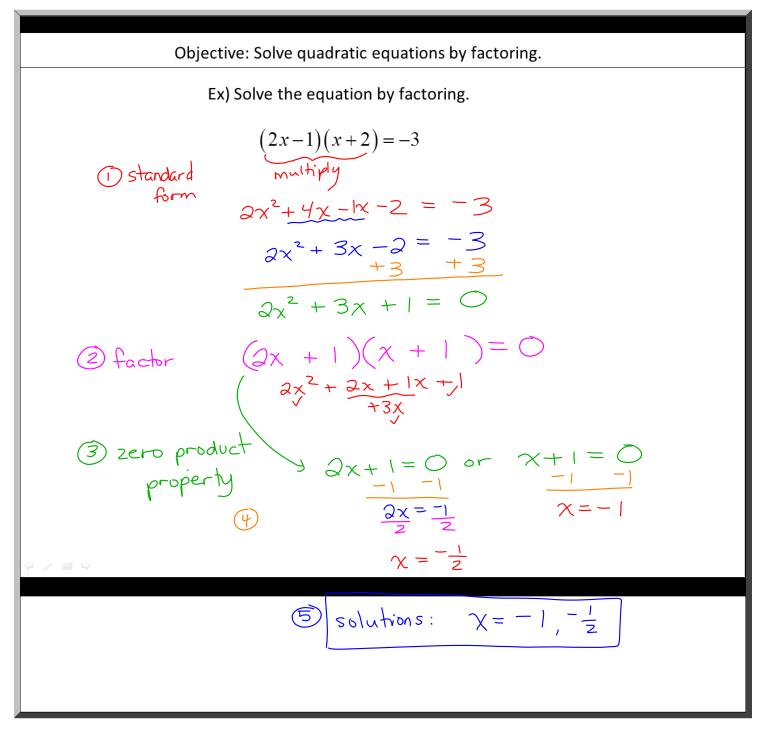
If the product of two factors is zero, then at least one of the factors must be equal to zero.

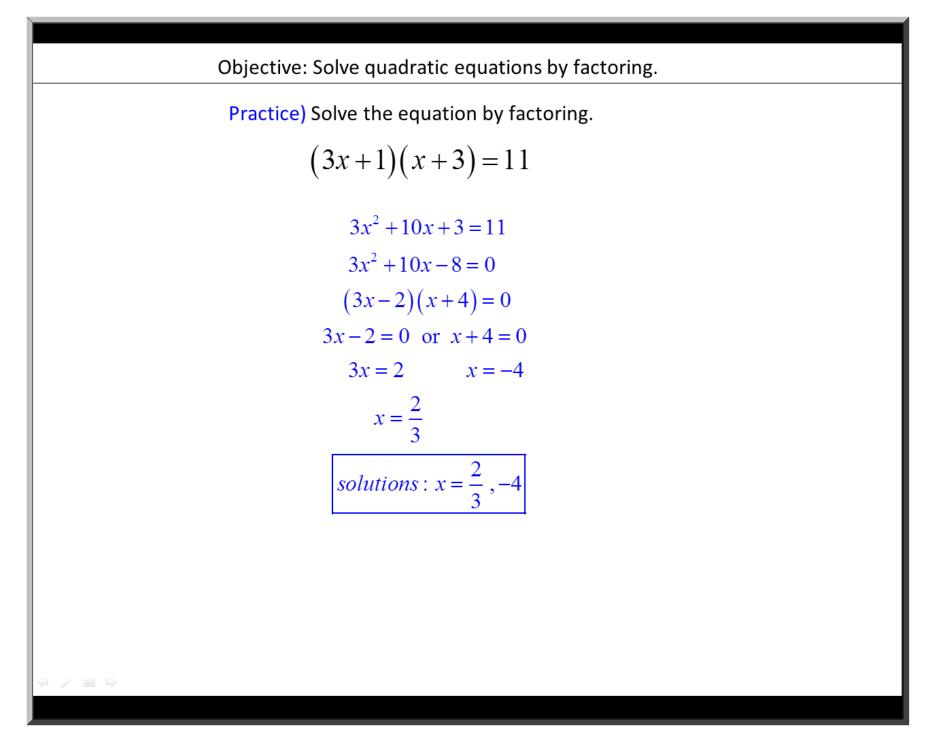
If  $a \cdot b = 0$ , then either a = 0 or b = 0.











Objective: Solve quadratic equations by factoring. Practice) Solve the equation by factoring. (2x-1)(3x-2)=12 $6x^2 - 7x + 2 = 12$  $6x^2 - 7x - 10 = 0$ (6x+5)(x-2)=06x + 5 = 0 or x - 2 = 06x = -5 x = 2 $x = \frac{-5}{-5}$  $x = -\frac{5}{6}, 2$ 

Captured on Wed Dec 06 2017 14:37:59

Objective: Solve quadratic equations by factoring.

## <u>Closure</u>

James solved a quadratic equation by factoring. His work is shown. What is the first mistake James made?

 $x^{2}-2x-15 = 2$ (x+3)(x-5) = 2 x+3 = 2 or x-5 = 2 x = -1 x = 7 [solutions : x = -1, 7]

The first mistake James made is that he factored before putting the equation in standard form.