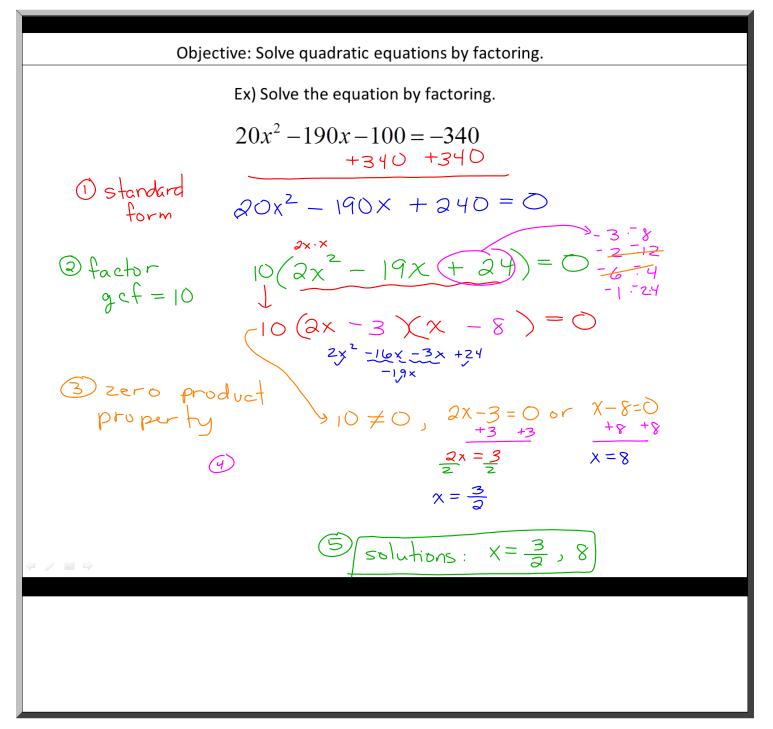
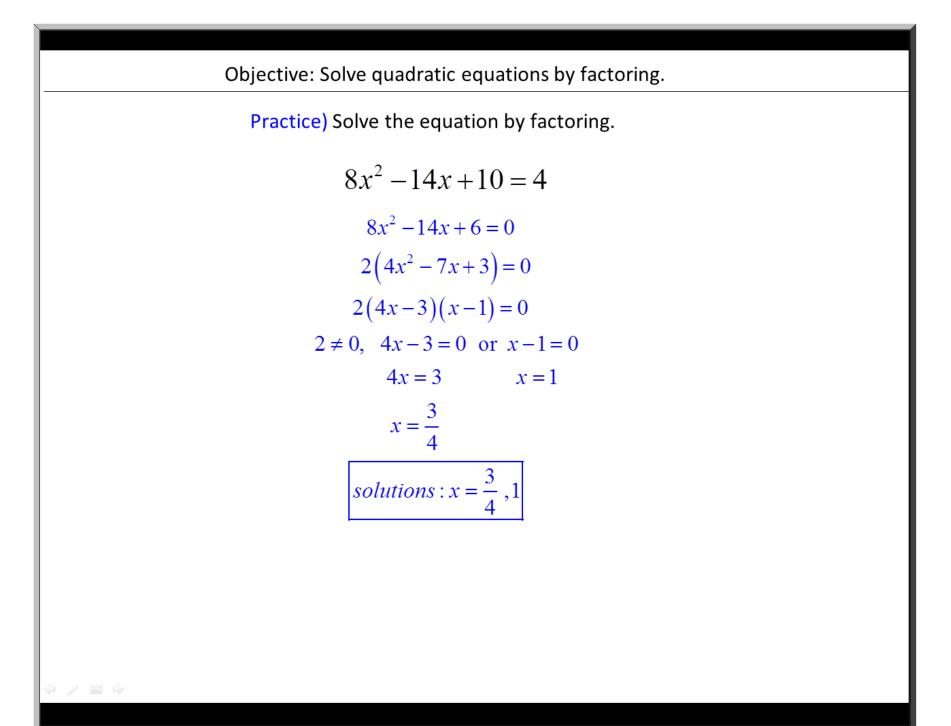
Objective: Solve quadratic equations by factoring. Concept Steps to Solve a Quadratic Equation by Factoring 1. Write the equation is standard form, $ax^2 + bx + c = 0$. 2. Factor the polynomial completely, including any greatest common factor. 3. Use the Zero Product Property. 4. Solve for the values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

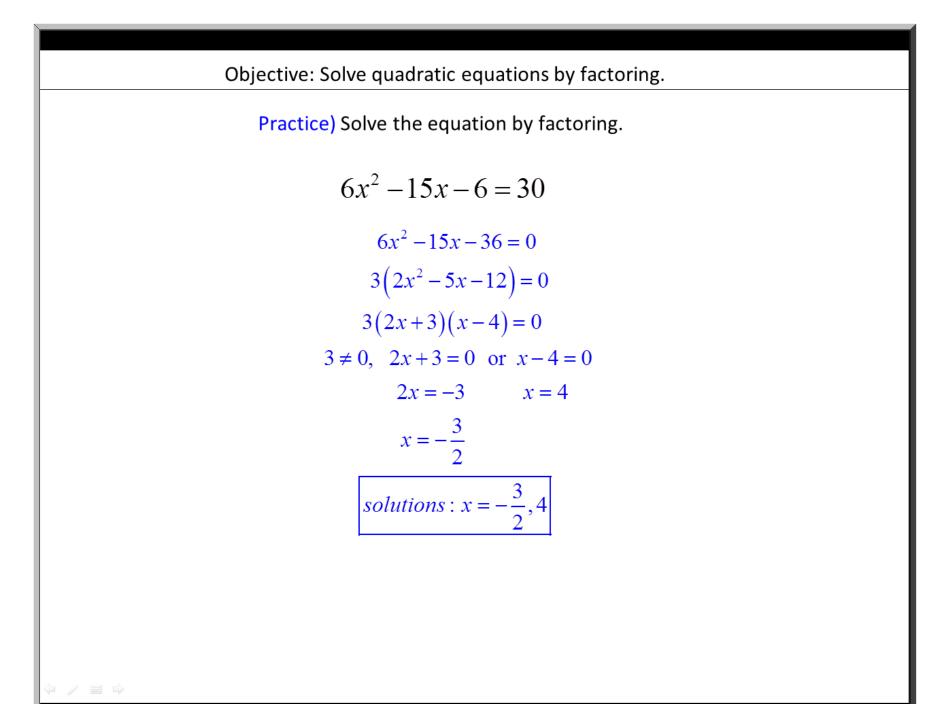
Zero Product Property

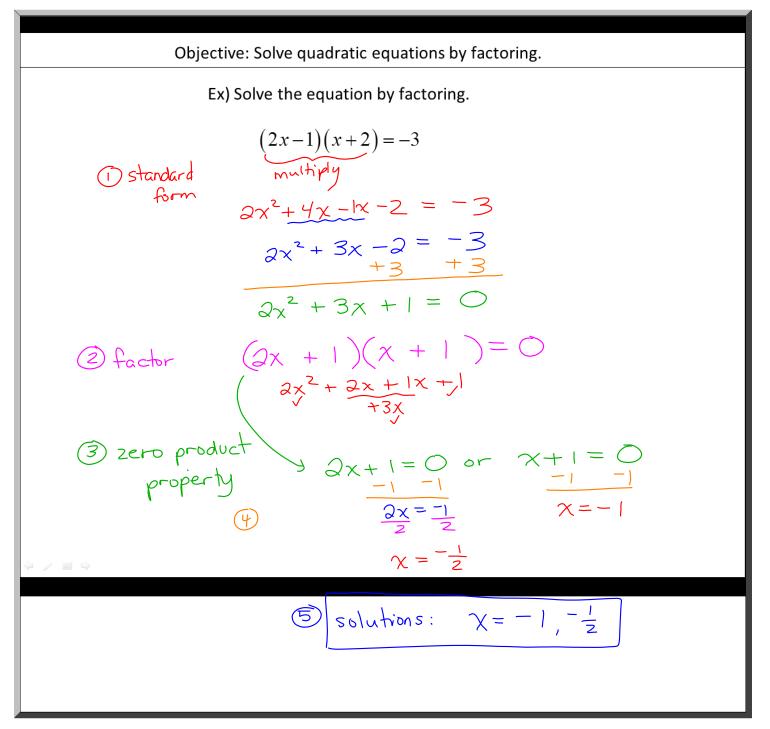
If the product of two factors is zero, then at least one of the factors must be equal to zero.

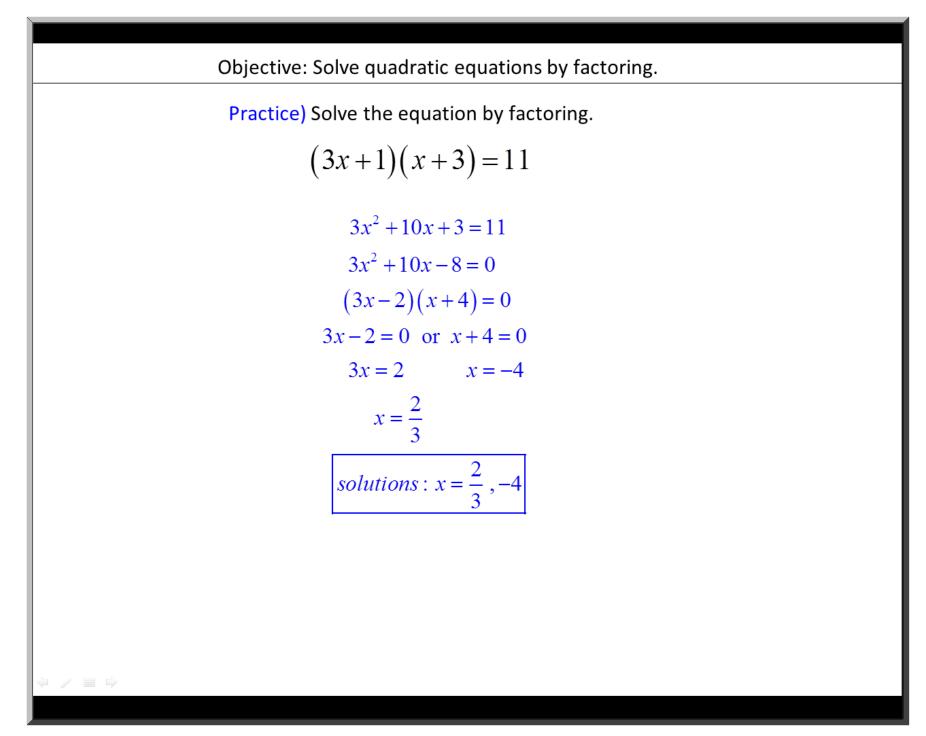
If $a \cdot b = 0$, then either a = 0 or b = 0.











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.