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| Quadratic Vocabulary | **Degree**: the power or exponent of a term.$$2x^{2}+4x-9$$1st-degree term2nd-degree termConstant term**Quadratic expression/equation**: an expression or equation in which the highest degree is 2.**Standard Form of a Quadratic Equation**: $ax^{2}+bx+c=0$* Notice that the equation must equal 0!
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| Solving a Quadratic Equation by Factoring | Steps:1. Arrange the equation in standard form. Make sure the equation equals 0.
2. Factor the polynomial.
3. Set each factor equal to 0.
4. Solve each equation for the variable.
5. Check your solutions by substitution.

Notice: * Quadratic equation will often have two solutions.
* Not all quadratic equations can be solved by factoring.
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| Guided Practice | 1. Solve $x^{2}+3x=0$.
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| 1. Solve $4x^{2}-26x=14$.
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|  | 1. Solve $5x^{2}-9x=0$.
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| 1. Solve $2x^{2}-32=0$.
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|  | 1. Solve $(x+4)(x-8)=28$.
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