

Name: _____

Date: _____

UNIT 8**LESSON 3****Do Now:**

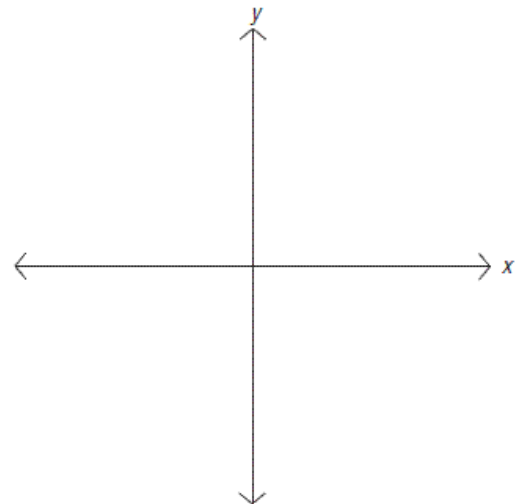
a) What is the standard form of a quadratic equation?	b) Factor: $x^2 + 10x - 24$	c) Factor: $x^2 + 3x$
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AIM: SOLVING QUADRATIC EQUATIONS (Day 2)1) Put the following equations into standard form:

a) $x(x - 4) = 5$	b) $x^2 - 10 = 9x$	c) $x^2 = 3x + 6$
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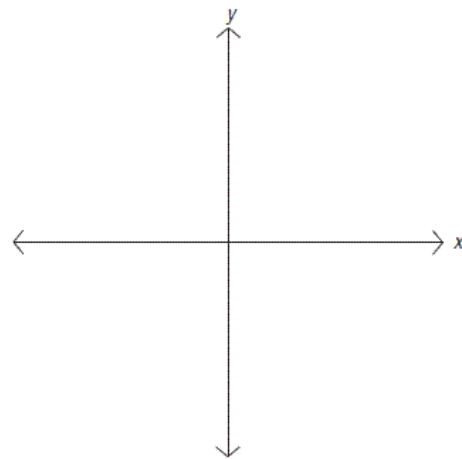
2) Algebraically solve for the roots: $y = x^2 - 4x - 5$ **Steps for solving Quadratics Equations:**

1. Put equation into standard form
2. Factor equation
3. T-bar and set each factor equal to zero
4. Solve each resulting equation
 - Check either:
 - a. Algebraically-substitute solutions back into the original equation
 - b. Graphically-use calculator to look for where the parabola crosses the x-axis.

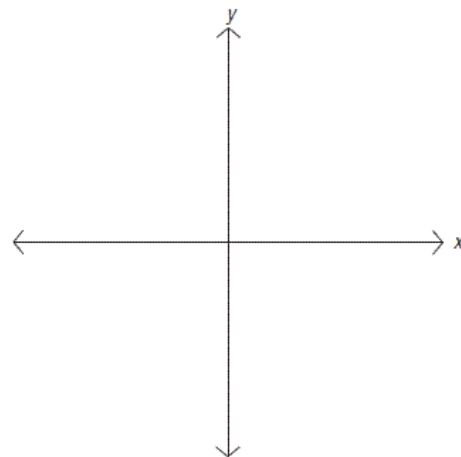
3) Graphically solve for the roots: $y = x^2 - 4x - 5$ 

4) What are the zeros of the function?

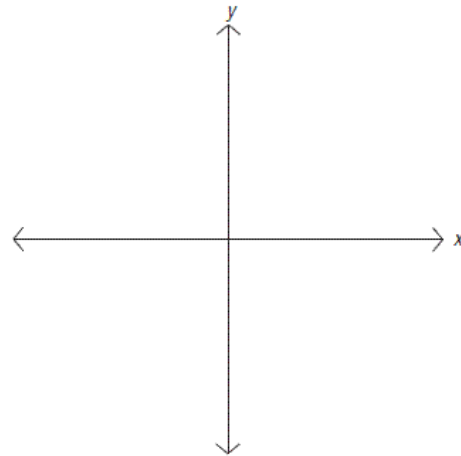
$$x^2 - 4x = 0$$



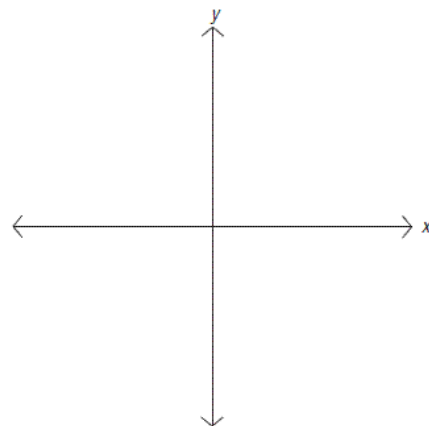
5) Solve for the roots: $x^2 - 25 = 0$



6) Solve for the x-intercepts: $x^2 + 2x - 15 = 0$



7) Solve for the roots: $x^2 - x = 6$



8) What are the zeros of the function? $x^2 = 8x - 16$

9) Solve for the x-intercepts: $(x - 5)(x^2 - 16) = 0$

10) What are the zeros of the function? $\frac{x-3}{7} = \frac{10}{x}$