

I can factor quadratics with $a=1$ and $a>1$, solve factorable quadratic equations, and apply quadratics to real-world situations.

Level 1

I can define what a factor of a product is.

Ex:

1. What is a factor? Give an example.

Level 2

I can factor quadratics with $a = 1$ and $a > 1$.

Ex:

Factor each completely.

1. $y = x^2 - 6x + 8$

2. $y = 8x^2 + 14x - 15$

Level 3

I can solve factorable quadratic equations.

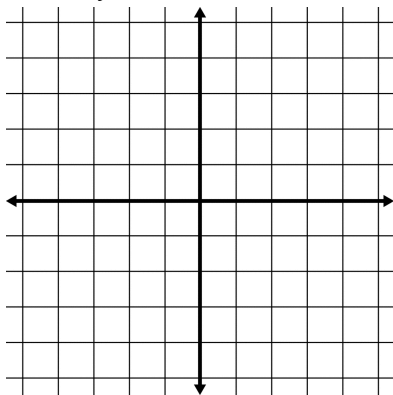
Ex:

Solve each equation.

1. $5 = x^2 - 4x$

Find the zeros. Sketch it.

2. $y = 3x^2 - 22x - 16$



Level 4

I can apply quadratics to real-world situations.

Ex:

Remember that the formula for free fall due to gravity is

$$y = \frac{1}{2}at^2 + v_o t + x_o,$$

where a is $-32 \frac{ft}{sec^2}$ on earth, t is time, v_o is the initial velocity, and x_o is the initial height of a projectile.

If you launched a green water balloon from 50 feet high in the football stands upwards at $76 \frac{ft}{sec}$, how long would it take to drench Mr. Rhodes, who is standing at the 50-yard line? (Write an equation and use factoring to solve.)