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.

<u>Ex</u>:

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.

Level 4

I can apply quadratics to real-world situations.

<u>Ex</u>:

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.)