Station 1

I can use properties of radicals to simplify expressions (9.1)

Simplify the expressions

1) $\sqrt{125}$

2) $\sqrt{72m^7}$

3) $\sqrt{\frac{36x^4}{121}}$

4) $\sqrt{\frac{8y^5}{81x^6}}$

Station 2

<u>I can simplify expressions by rationalizing the denominator (9.1)</u>

1) $\frac{4}{\sqrt{6}}$

2) $-\frac{7}{2\sqrt{3}}$

3) $\frac{6}{\sqrt{54}}$

<u>I can perform operations with radicals (9.1)</u>

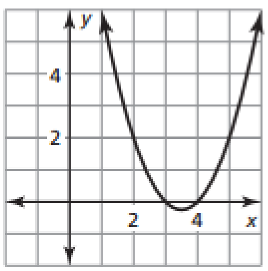
1) $3\sqrt{6} - 4\sqrt{24} + 2\sqrt{20}$

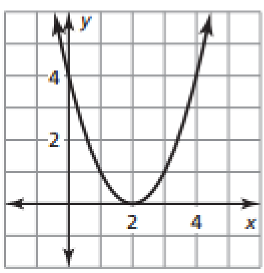
2) $\sqrt{10}(\sqrt{50} - \sqrt{18})$

Station 3

<u>I can solve quadratic equations by graphing (9.2)</u>

Use the graph to solve the equation

1) 

2) 

Solve the equation by graphing

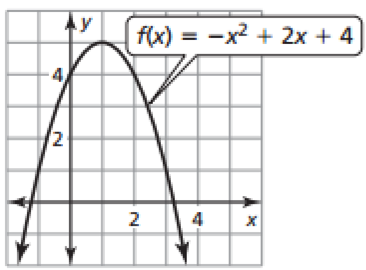
3) $x^2 + 4x + 20 = 0$

4) $x - 6 = -x^2$

Station 4

I can use graphs to find and approximate the zeros of functions (9.2)

1) Round to the nearest HUNDREDTH



I can solve real-life problems using graphs of quadratic functions (9.2)

1) The height h in feet of a fly ball in a baseball game can be modeled by $h = -16t^2 + 28t + 8$ where t is the time in seconds.

a) Do both t-intercepts of the graph have meaning in this situation? EXPLAIN

b) No one caught the fly ball. After how many seconds did the ball hit the ground?

Station 5

I can solve quadratic equations using square roots (9.3)

1) $2x^2 + 6 = 14$

2) $3x^2 = 81$

3) $3x^2 - 5 = 22$

4) $(3x + 2)^2 = 81$

I can approximate the solutions of quadratic equations (9.3)

1) $3x^2 - 1 = 14$

2) $x^2 + 5 = 11$