Station 1

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

Simplify the expressions

1) $\sqrt{125}$

$$5\sqrt{5}$$

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

$$6m^2\sqrt{2m}$$

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

$$\frac{6x^2}{11}$$

4) $\sqrt{\frac{8y^5}{81x^6}}$ $\frac{2y^2\sqrt{2y}}{9x^3}$

Station 2

I can simplify expressions by rationalizing the denominator (9.1)

1) $\frac{4}{\sqrt{6}}$ $\frac{2\sqrt{6}}{3}$

2) $-\frac{7}{2\sqrt{3}}$ $-\frac{7\sqrt{3}}{6}$

3) $\frac{6}{\sqrt{54}}$ $\frac{\sqrt{6}}{2}$

I can perform operations with radicals (9.1)

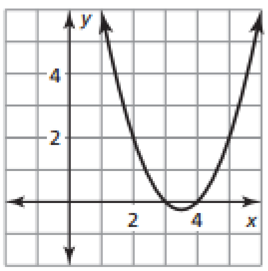
1) $3\sqrt{6} - 4\sqrt{24} + 2\sqrt{20}$ $-5\sqrt{6} + 4\sqrt{5}$

2) $\sqrt{10}(\sqrt{50} - \sqrt{18})$ $4\sqrt{5}$

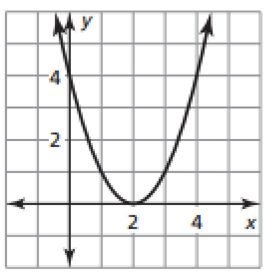
Station 3

I can solve quadratic equations by graphing (9.2)

Use the graph to solve the equation

1) 

X=3, 4

2) 

X=2

Solve the equation by graphing

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

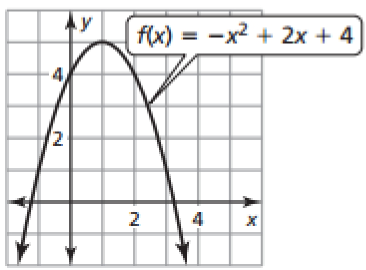
No real solutions

4) $x - 6 = -x^2$ X = -3, 2

Station 4

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

1) Round to the nearest HUNDREDTH



$x \approx 2.2, -1.2$

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 Yes, start and end of ball travel

b) No one caught the fly ball. After how many seconds did the ball hit the ground? x = 2 seconds

Station 5

I can solve quadratic equations using square roots (9.3)

1) $2x^2 + 6 = 14$ $\qquad x = \pm 2$

2) $3x^2 = 81$ $\qquad x = \pm 3\sqrt{3}$

3) $3x^2 - 5 = 22$ $\qquad x = \pm 3$

4) $(3x + 2)^2 = 81$ $\qquad x = \frac{7}{3}, -\frac{11}{3}$

I can approximate the solutions of quadratic equations (9.3)

1) $3x^2 - 1 = 14$ $\qquad x \approx 2.24$

2) $x^2 + 5 = 11$ $\qquad x \approx 2.45$