4.RC.2 – Intercepts of Quadratic Functions

The following problems will be completed with a partner in a Rally Coach format.

Partners take turns: one solving a problem while the other coaches.

Name: _____

PARTNER A

1A) *Use the quadratic formula to find the zeros (rounded to 2 decimal places):*

$$f(x) = -2x^2 + 8x + 7$$

2A) *Find the zeros and the y-intercept.*

$$f(x) = 3(x + 2)(x + 6)$$

3A) *Write the equation of the parabola in intercept form:*

x-intercepts of 9 & 1 and passes through (0, -18)

4A) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = x^2 + 5x - 24$$

Name: _____

PARTNER B

1B) *Use the quadratic formula to find the zeros (rounded to 2 decimal places):*

$$f(x) = -3x^2 - 6x + 5$$

2B) *Find the zeros and the y-intercept.*

$$f(x) = -2(x - 3)(x + 5)$$

3B) *Write the equation of the parabola in intercept form:*

x-intercepts of 12 & -6 and passes through (14, 4)

4B) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = x^2 + 2x - 15$$

5A) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = x^2 + 9x - 22$$

5B) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = x^2 - x + 72$$

6A) *Use the Square Root Property to find the zeros (rounded to 2 decimal places):*

$$f(x) = -0.5(x - 6)^2 + 20$$

6B) *Use the Square Root Property to find the zeros (rounded to 2 decimal places):*

$$f(x) = 0.2(x + 5)^2 - 15$$

7A) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = 8x^2 + 6x + 1$$

7B) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = 6x^2 - 5x + 1$$

8A) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = 6x^2 + 11x - 10$$

8B) *Write the quadratic function in intercept/ factored form and find its zeros/x-intercepts:*

$$f(x) = 10x^2 - 9x - 9$$

9A) *Use the quadratic formula to find the zeros (rounded to 2 decimal places):*

$$f(x) = 6x^2 - 2x - 11$$

9B) *Use the quadratic formula to find the zeros (rounded to 2 decimal places):*

$$f(x) = 3x^2 + 4x - 18$$