

# WAY COOL Algebra

## Parabolas

Name \_\_\_\_\_ Period \_\_\_\_\_  
Putting It All Together Date \_\_\_\_\_

1) Declare the **coefficients** of each Quadratic.

$$y = -x^2 - 2x + 8$$

$a =$  \_\_\_\_\_  $b =$  \_\_\_\_\_  $c =$  \_\_\_\_\_

$$y = x^2 + 2x - 15$$

$a =$  \_\_\_\_\_  $b =$  \_\_\_\_\_  $c =$  \_\_\_\_\_

2) Determine the parabola's a) **y-intercept**, b) **direction**, and c) **size**.

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

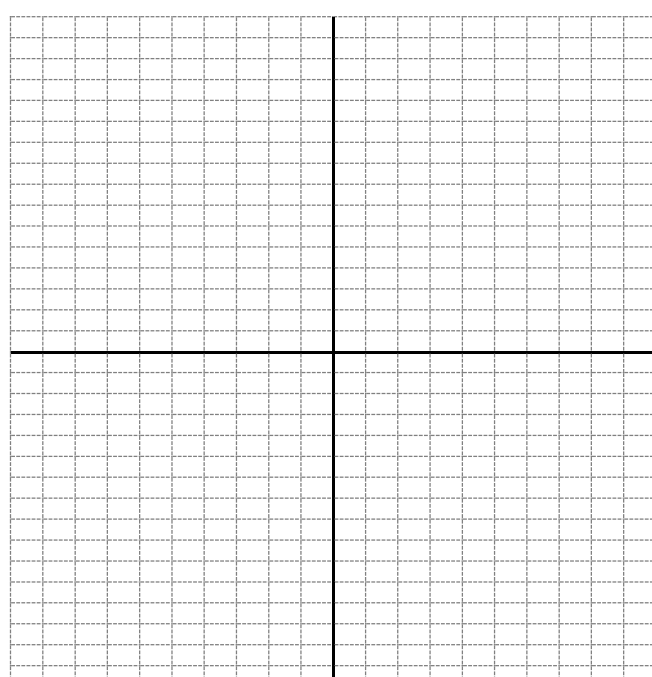
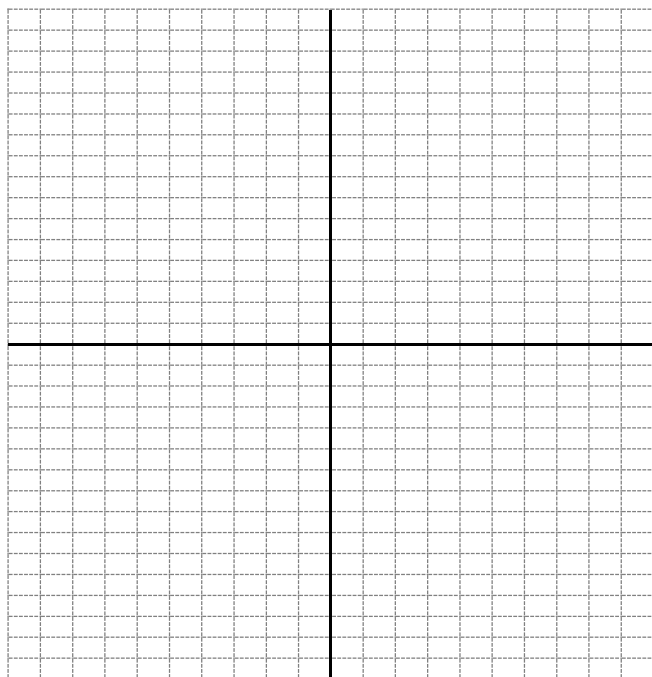
3) Find the **Vertex** of each quadratic's parabola and use it to help make a table of values. **SHOW WORK.**

(\_\_\_\_, \_\_\_\_)

(\_\_\_\_, \_\_\_\_)

4) Make a **table** and **graph**. **LABEL** the **Vertex**, **x-intercepts**, and **y-intercept**.





5) Find the **Roots** from your Parabola. How many Solutions does your Quadratic have ?

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## Parabolas

Name \_\_\_\_\_ Period \_\_\_\_\_  
Putting It All Together Date \_\_\_\_\_

1) Declare the **coefficients** of each Quadratic.

$$y = -x^2 + 6x$$

$a =$  \_\_\_\_\_  $b =$  \_\_\_\_\_  $c =$  \_\_\_\_\_

$$y = \frac{1}{2}x^2 - 3x + 7$$

$a =$  \_\_\_\_\_  $b =$  \_\_\_\_\_  $c =$  \_\_\_\_\_

2) Determine the parabola's a) **y-intercept**, b) **direction**, and c) **size**.

a)	b)	c)	a)	b)	c)
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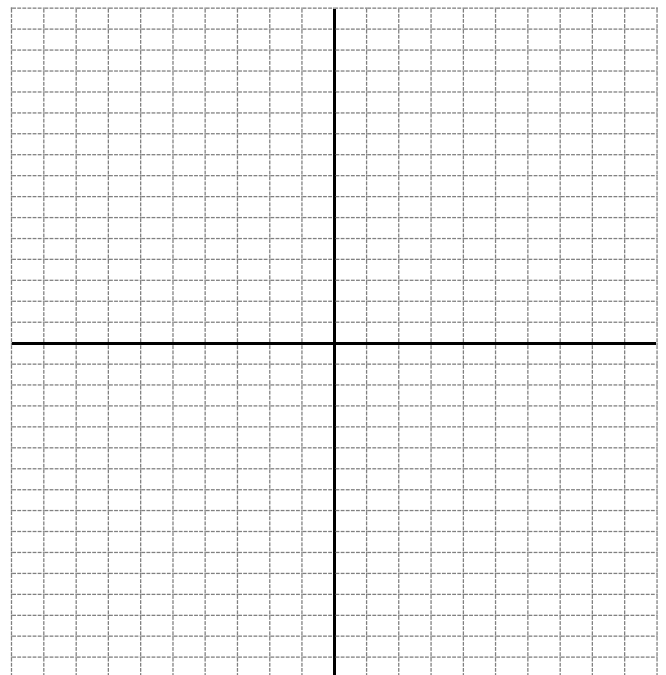
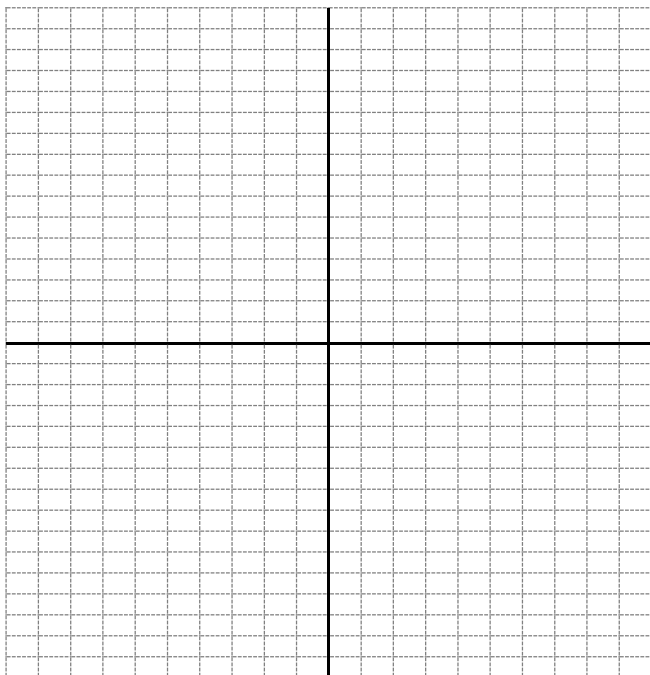
3) Find the **Vertex** of each quadratic's parabola and use it to help make a table of values. **SHOW WORK.**

(\_\_\_\_, \_\_\_\_)

(\_\_\_\_, \_\_\_\_)

4) Make a **table** and **graph**. **LABEL** the **Vertex**, **x-intercepts**, and **y-intercept**.





5) Find the **Roots** from your Parabola. How many Solutions does your Quadratic have ?