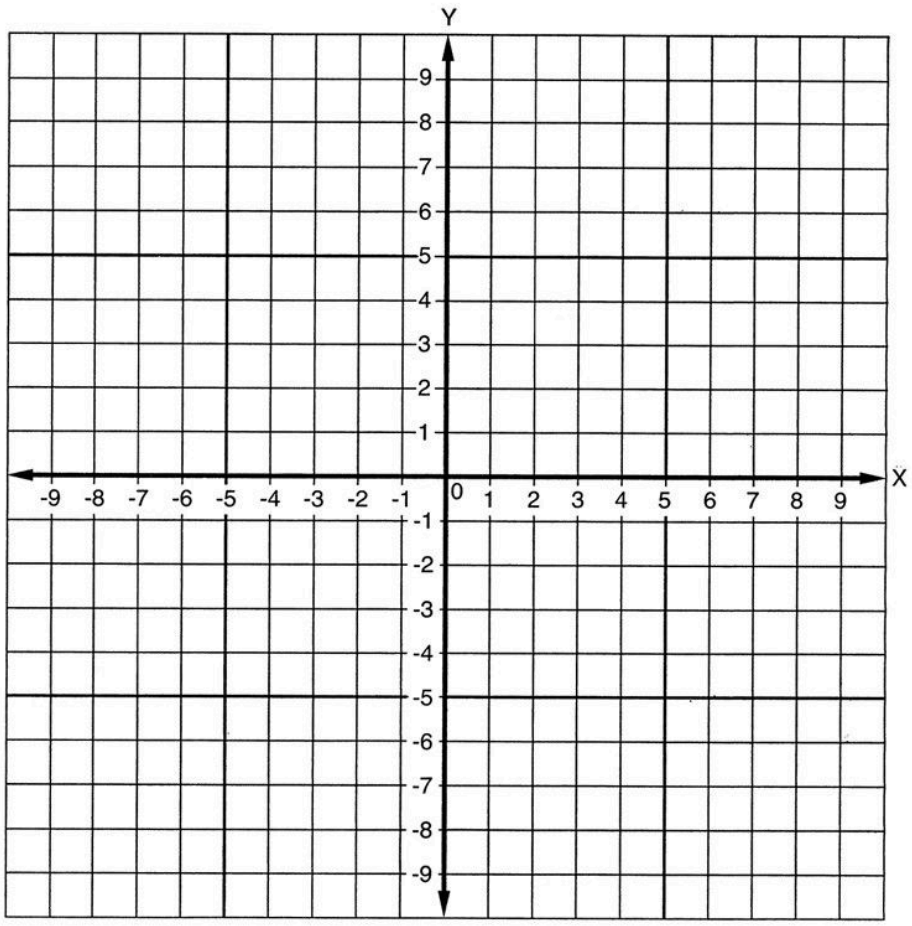
Name_____ Per_____ Date_____

Lesson: 5.1 Review

1. Equation to Graph: Use the given equation to complete the following table. Graph the coordinates and decide if the free throw will go in or not. (feel free to use a calculator, not your phone calculator)

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

x	y
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	



Use the Table or Graph to answer these questions.

i. What are the x-intercepts: (—,—) (—,—)

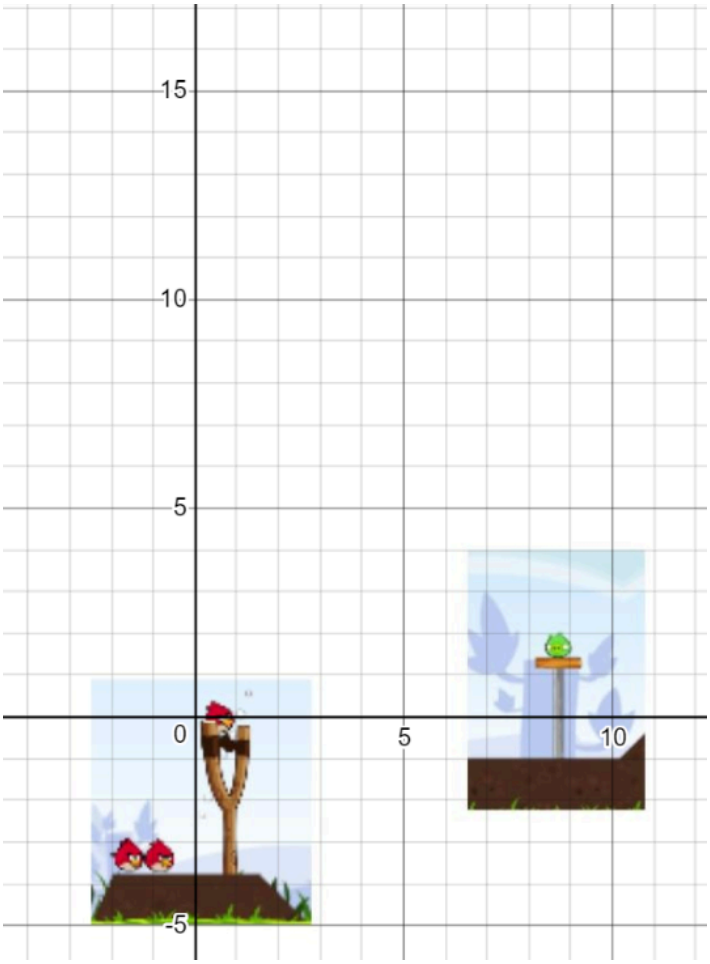
ii. What is the y-intercept: (—,—)

iii. What is the vertex: (—,—)

iv. Where is the line of symmetry: $x =$ ___

2. Table to Equation: Graph the following coordinates from the table, then find the quadratic equation that represents the values from the table. Will your equation hit the target?

x	y
1	0
2	7
3	12
4	15
5	16
6	15
7	12
8	7
9	0



Equation: y = _____

Use the Table or Graph to answer these questions.

i. What are the x-intercepts: (—,—) (—,—)

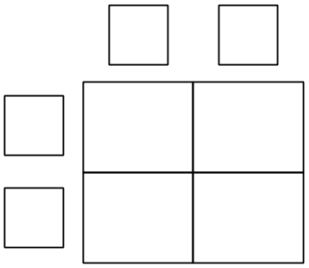
ii. What is the y-intercept: (—,—)

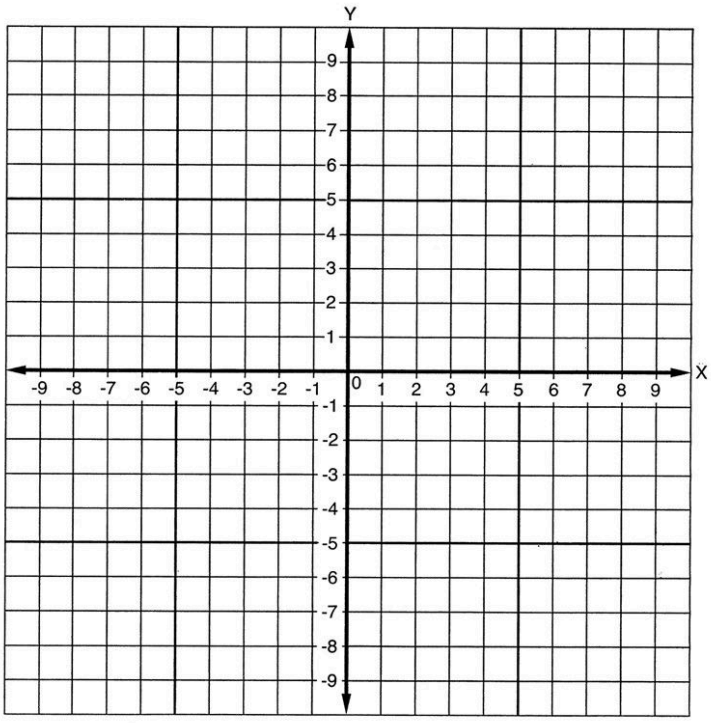
iii. What is the vertex: (—,—)

iv. Where is the line of symmetry: $x =$ ___

3. Graphing parabolas by Factoring.

Use the Area Model and Diamond process to find the x-intercepts of $y = x^2 - 2x - 3$. Graph the x-intercepts, the y-intercept, and the vertex, then draw a rough sketch of the Parabola.





Use the Table or Graph to answer these questions.

i. What are the x-intercepts: $(\_,\_)$ $(\_,\_)$

ii. What is the y-intercept: $(\_,\_)$

iii. What is the vertex: $(\_,\_)$

iv. Where is the line of symmetry: $x = \_\_\_$