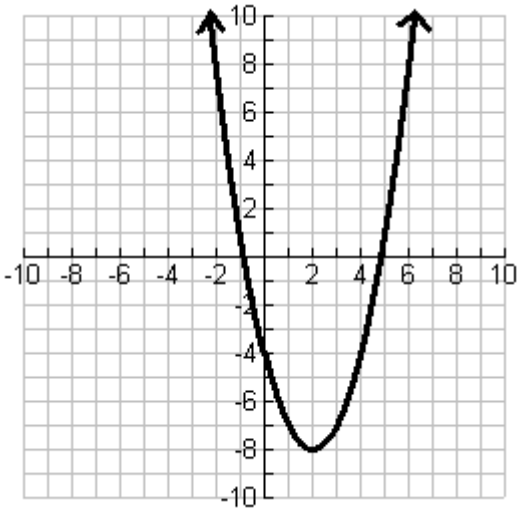
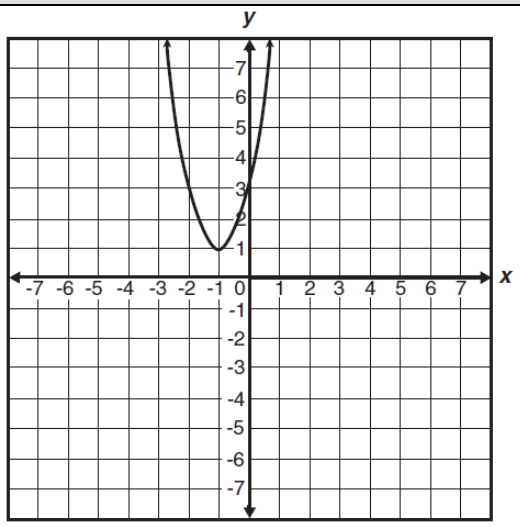
Name: _____

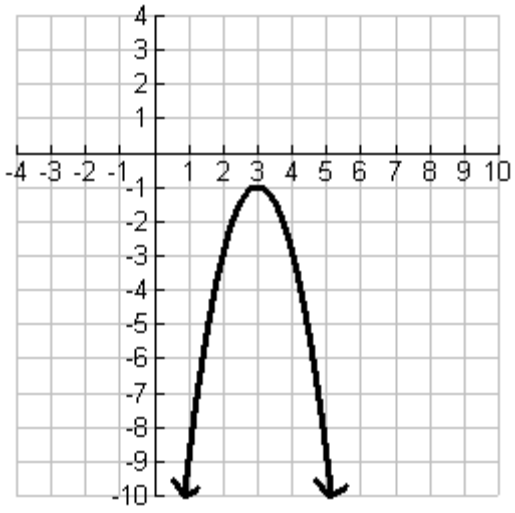
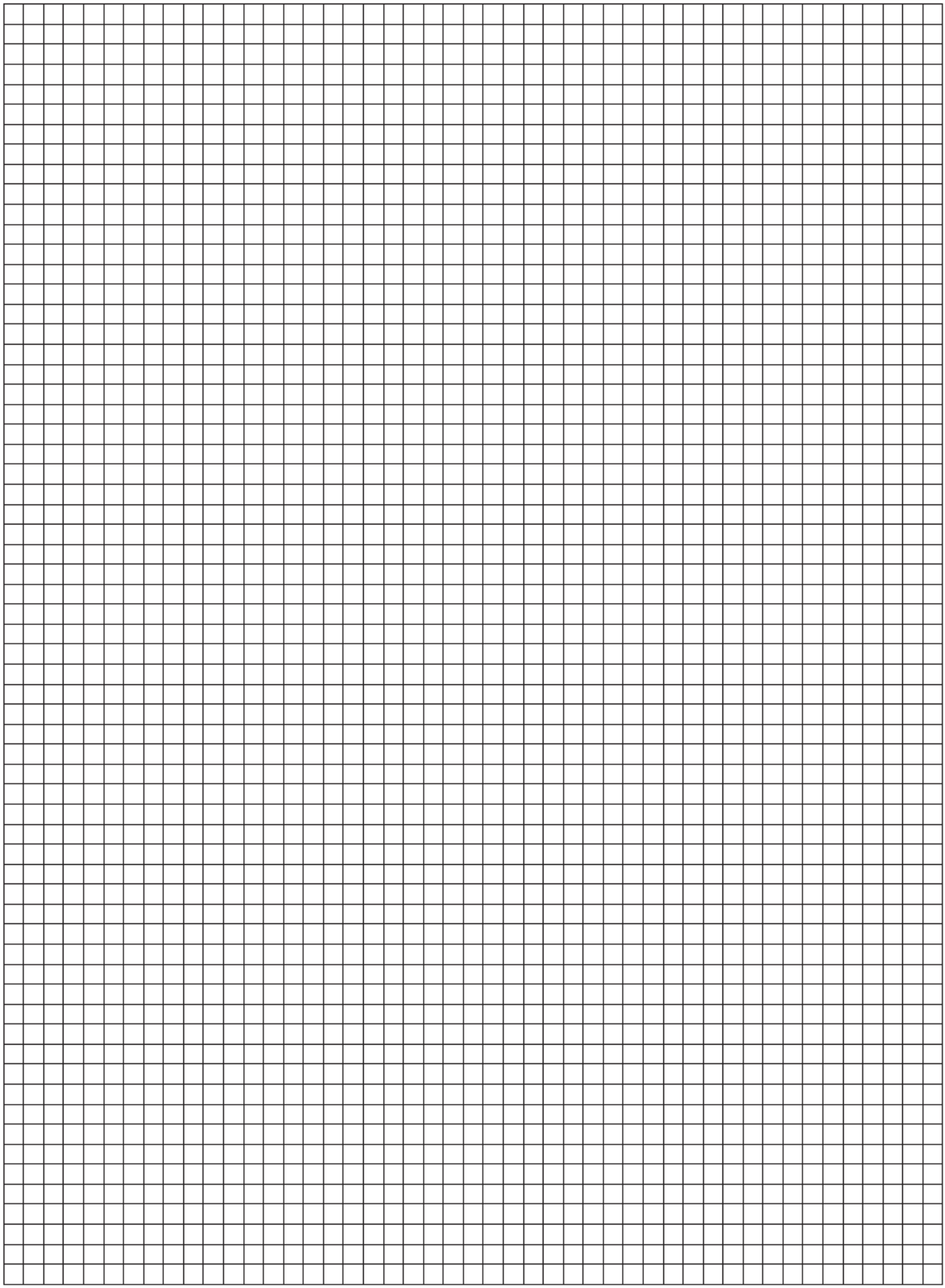
Odd One Out — Quadratic Functions

Quadratic Function 1	Which one is the Odd One Out?	Why is it the Odd One Out?
	• The roots of this equation are $(0,-4)$ and $(5,0)$. • The vertex of this quadratic function is $(2,-8)$. • This graph has a y-intercept at $(0,-4)$. • The range of this graph is $y \geq -8$.	

Quadratic Function 2	Which one is the Odd One Out?	Why is it the Odd One Out?
	• The graph has a y-intercept at $(0,3)$. • The graph has a vertex at $(-1,1)$. • The graph has a maximum value at $(-1,1)$. • The graph has a line of symmetry of $x=-1$.	

Quadratic Function 3	Which one is the Odd One Out?	Why is it the Odd One Out?
The factored form of a quadratic function is : $y=(x-4)(2x-3)$	• The graph has a y-intercept at $(0,12)$. • The domain of the function is all real numbers. • The vertex of the graph is $(3,-4)$.	

Quadratic Function(s) 4	Which one is the Odd One Out?	Why is it the Odd One Out?
Look at the equations below for two quadratic functions. **Equation 1:** $y = 3(x-5)^2 + 1$ **Equation 2:** $y = 3(x+5)^2 + 1$	• Equation 1 is a reflection of Equation 2 over the y- axis. • Both equations have minimum points that fall on the line $y = 1$. • Both graphs are shifted to the right 5 units from the parent function.	

Quadratic Function 5	Which one is the Odd One Out?	Why is it the Odd One Out?
	• The graph has a y-axis line of symmetry. • There are no real solutions to this function. • The range of the function is $y \leq -1$.	

Quadratic Function 6	Which one is the Odd One Out?	Why is it the Odd One Out?
The equation for a quadratic function is shown below: $6x^2 + 9x - 6 = 0$	• This function has x-intercepts at $(-2,0)$ and $(\frac{1}{2}, 0)$. • This function has a y-intercept of $(0,-8)$. • This function has no maximum value.