

Quiz 166

Find the vertex and intercepts, then graph.

1. $y = 2x^2 - 4x$

				4				
				3				
				2				
				1				
<i>x</i>				0	1	2	3	4
	-3	-2	-1	0	1	2	3	4
				-1				
				-2				
				-3				
				<i>y</i>				

2. $y = -x^2 - 2x + 3$

					5			
					4			
					3			
					2			
					1			
<i>x</i>					0	1	2	3
	-4	-3	-2	-1	0	1	2	3
					-1			
					-2			
					<i>y</i>			

3. A parabola has a vertex at $(-2, -8)$ and passes through $(1, 10)$. What are the zeros of the parabola?

4. The parabola $y = x^2$ is scaled by 4, flipped over the x -axis, and shifted 5 units to the left. Find an equation of the transformed parabola in standard form.

5. $h(t) = -16t^2 + 96t$

A ball is shot vertically upward from ground level with an initial speed of 96 feet per second. The function above models its height h , in feet, after t seconds. When will the ball hit the ground?