

IDENTIFYING QUADRATIC FEATURES

1. Circle which equation ^{or equations} represents a quadratic function.

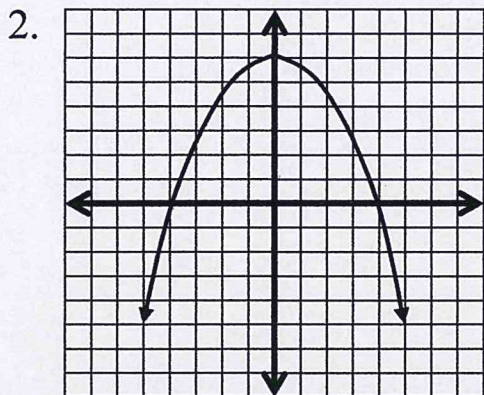
$y = 3x^2 - 2x + 7$

$y = 5x^3 + 2x - 1$

$y = 6x + 9$

$y = x^2 + 2$

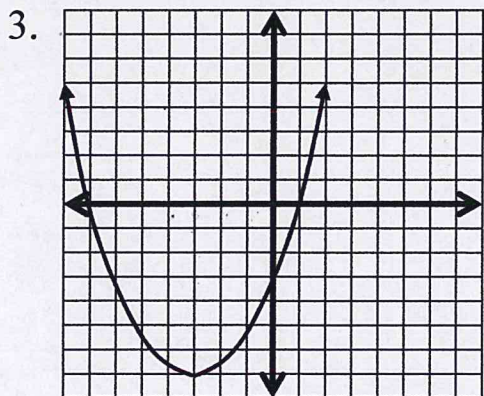
➤ Find the vertex, axis of symmetry, and zeros of each graphed quadratic function.



Vertex: $(0, 6)$

Axis of Symmetry: $x = 0$

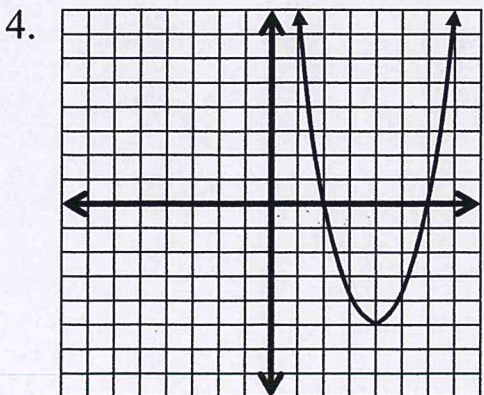
Zeros: $(-4, 0)$, $(4, 0)$



Vertex: $(-3, -7)$

Axis of Symmetry: $x = -3$

Zeros: $(-7, 0)$ and $(1, 0)$



Vertex: $(4, -5)$

Axis of Symmetry: $x = 4$

Zeros: $(2, 0)$ $(6, 0)$

How is the vertex & axis of symmetry related? *Answer: the x-coordinate of the vertex is the same as the axis of symmetry.*