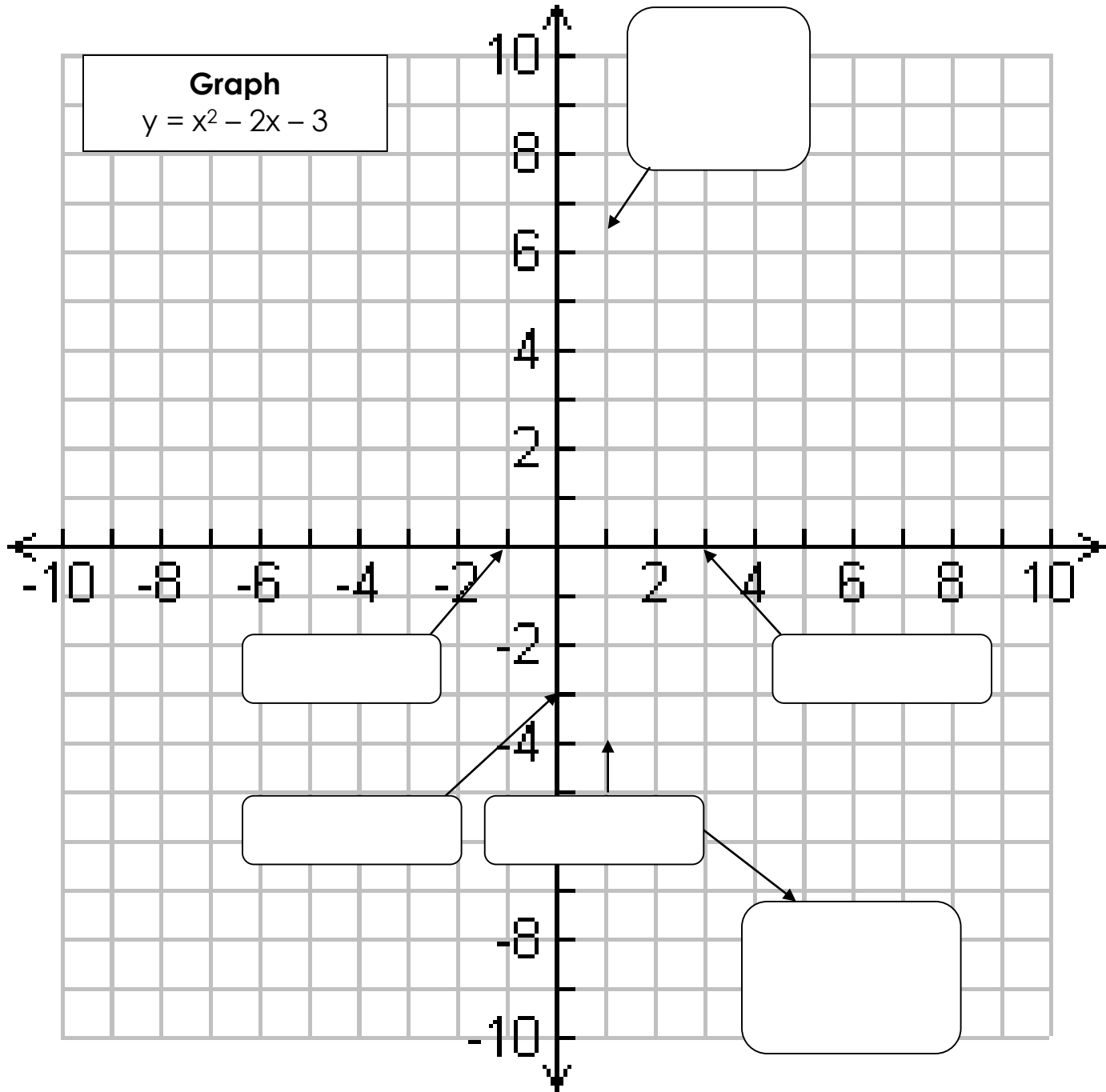


Graphing Standard Form of a Quadratic

Standard Form: $y =$



Important Vocabulary

Y-Intercept: _____

X-Intercept (root, zero, solution): _____

Vertex: _____

Axis of Symmetry: _____

"a" Value: _____

Parabola: _____

AOS Formula

VERTEX AND AXIS OF SYMMETRY

Step 1: Solve for the Axis of Symmetry using the AOS Formula

Step 2: Substitute AOS into the equation for x.

Step 3: Solve for y.

Step 4: Write the vertex as an ordered pair (x, y)

$$X^2 - 6x + 4$$

Example 5: Find the vertex and the axis of symmetry for each function.

a) $y = -2x^2 + 4x - 9$

b) $y = x^2 - 10$

c) $y = x^2 + 4x - 1$

GRAPHING STANDARD FORM

Example 2: Sketch the graph of $y = x^2 - 1$

a = _____ b = _____ c = _____

Opens: _____

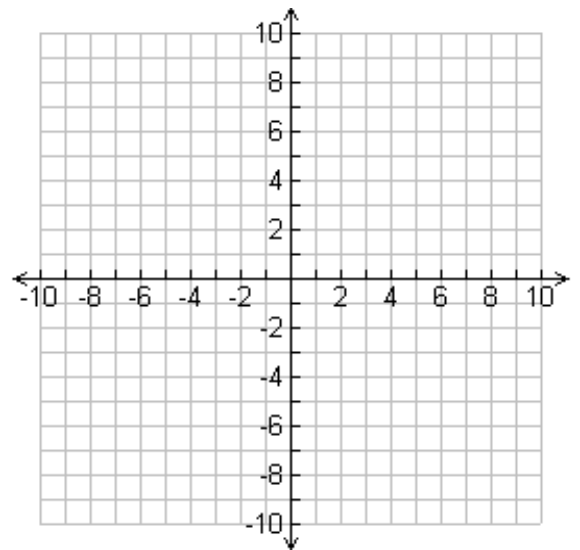
AOS: _____

Vertex: _____

Y-Int: _____

Roots: _____

x	y



Example 3: Sketch the graph of $y = x^2 - 1$

Opens: _____

AOS: _____

Vertex: _____

Y-Int: _____

Roots: _____

$a =$ _____ $b =$ _____ $c =$ _____

x	y

