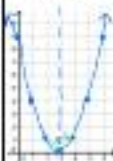


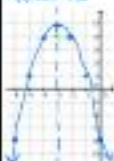
Practice Worksheet: Graphing Quadratic Functions in Vertex Form

For #1-6, label the vertex of symmetry, vertex, y-intercept, and at least three more points on the graph.

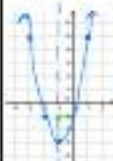
1. $y = (x + 2)^2 + 1$
 Axis of Symmetry is $x = -2$
 Vertex: $(-2, 1)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(-4, 5), (-1, 5)$
 y-intercept is $(0, 5)$



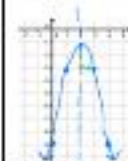
2. $y = (x + 3)^2 + 4$
 Axis of Symmetry is $x = -3$
 Vertex: $(-3, 4)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(-5, 8), (-1, 8)$
 y-intercept is $(-1, 8)$



3. $y = (x + 1)^2 - 3$
 Axis of Symmetry is $x = -1$
 Vertex: $(-1, -3)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(-3, -2), (1, -2)$
 y-intercept is $(0, -2)$



4. $y = (x + 1)^2 + 2$
 Axis of Symmetry is $x = -1$
 Vertex: $(-1, 2)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(-3, 5), (1, 5)$
 y-intercept is $(0, 3)$



5. $y = (x - 1)^2 + 2$
 Axis of Symmetry is $x = 1$
 Vertex: $(1, 2)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(-1, 3), (3, 3)$
 y-intercept is $(0, 3)$



6. $y = (x - 2)^2 - 2$
 Axis of Symmetry is $x = 2$
 Vertex: $(2, -2)$
 Opens up $\uparrow$
 Graphs point and more from the vertex is $(0, -2), (4, -2)$
 y-intercept is $(0, -2)$

