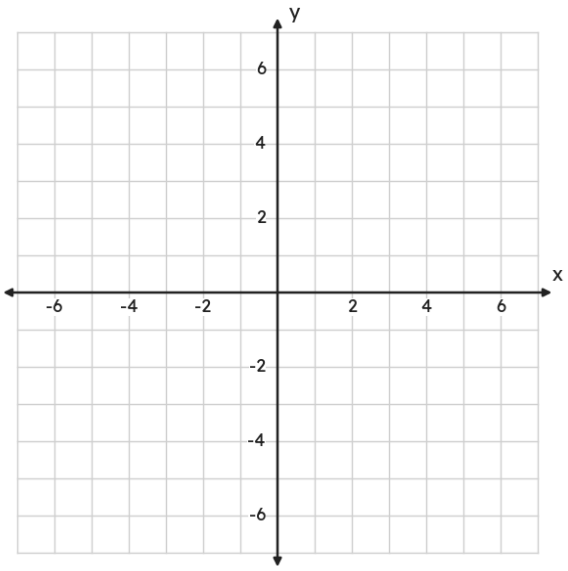
Name: _____ Date: _____

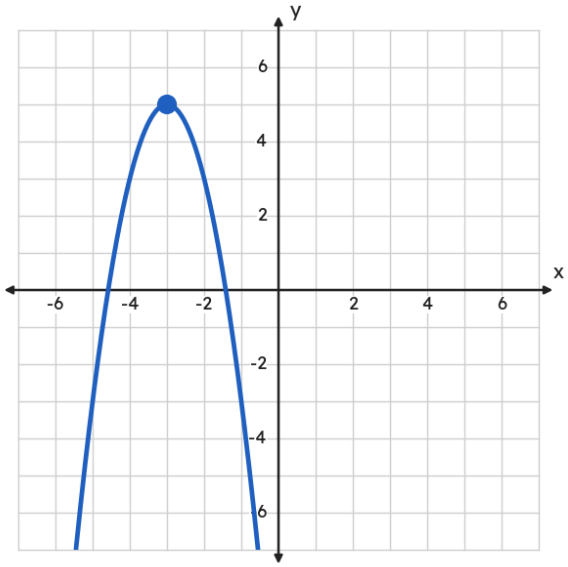
Features Forms Quadratic Functions - Medium

Graph each quadratic function and label its key features. For a graph that is drawn, read its features from the graph.

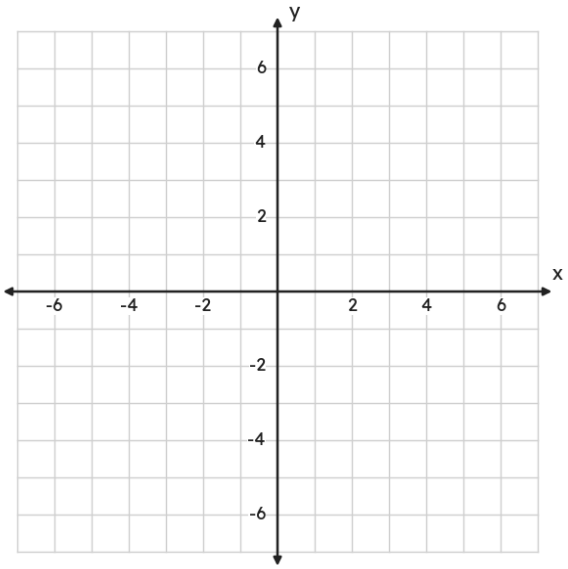
1. Graph $y = -(x + 1)(x - 3)$.



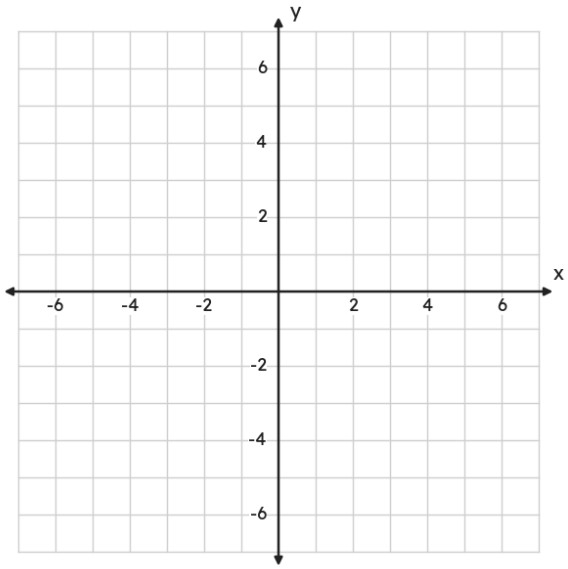
2. Use the graph to give the vertex, the axis of symmetry, and the maximum or minimum value.



3. Graph $y = -x^2 - 2x + 4$.



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

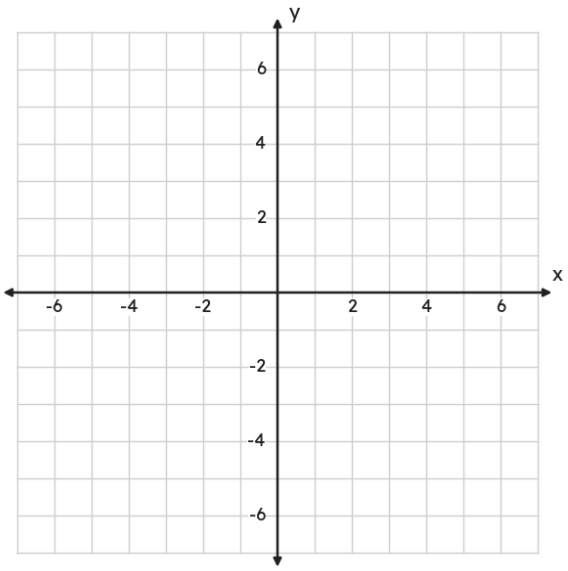


Name: _____ Date: _____

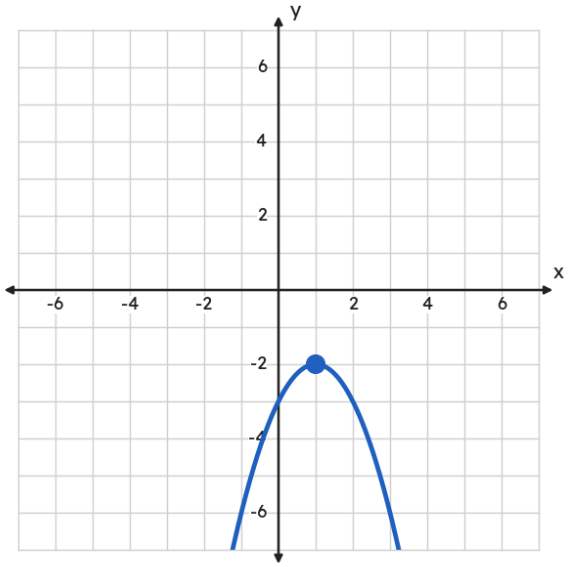
Features Forms Quadratic Functions - Medium

Graph each quadratic function and label its key features. For a graph that is drawn, read its features from the graph.

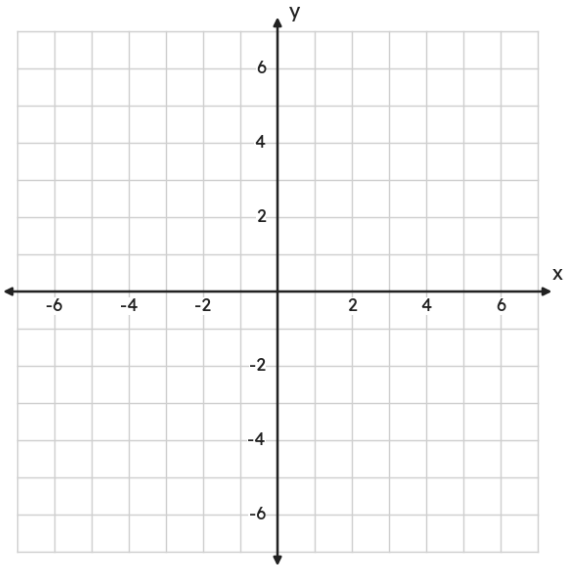
5. Graph $y = 2x^2 - 12x + 14$.



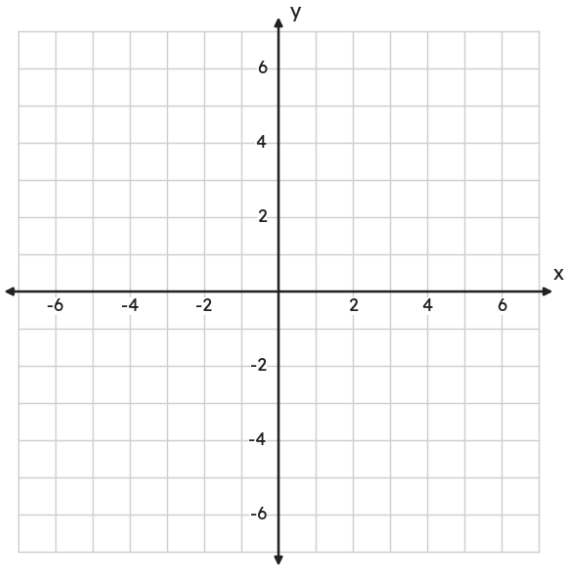
6. Use the graph to give the vertex, the axis of symmetry, and the maximum or minimum value.



7. Graph $y = (x + 5)(x + 1)$.

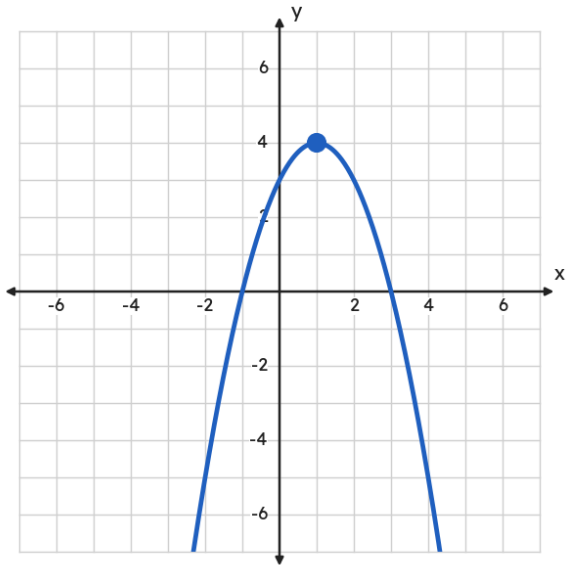


8. Graph $y = -x^2 + 4$.



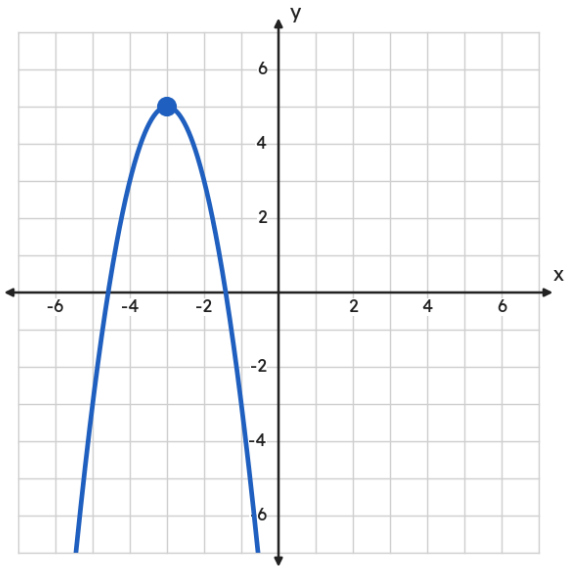
Features Forms Quadratic Functions - Medium - Answer Key

1. Graph $y = -(x + 1)(x - 3)$.



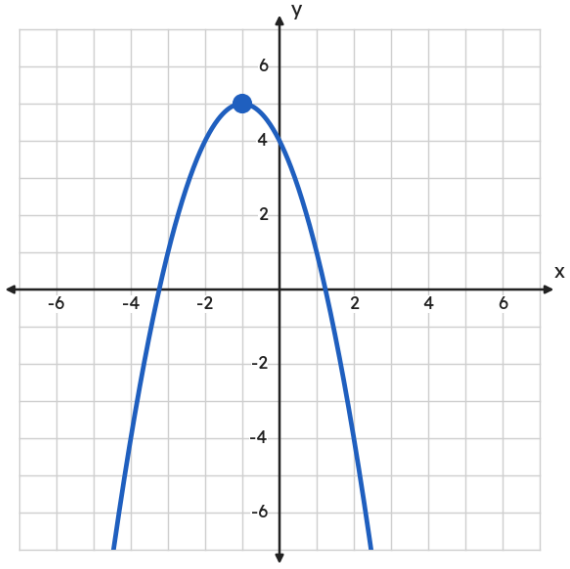
x-intercepts -1 and 3; axis x = 1; vertex (1, 4)

2. Use the graph to give the vertex, the axis of symmetry, and the maximum or minimum value.



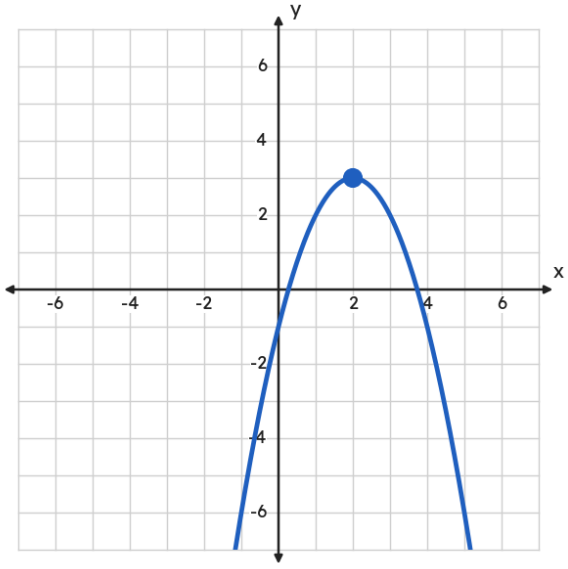
vertex (-3, 5); axis x = -3; maximum value 5

3. Graph $y = -x^2 - 2x + 4$.



vertex (-1, 5); axis x = -1; y-intercept (0, 4); maximum 5

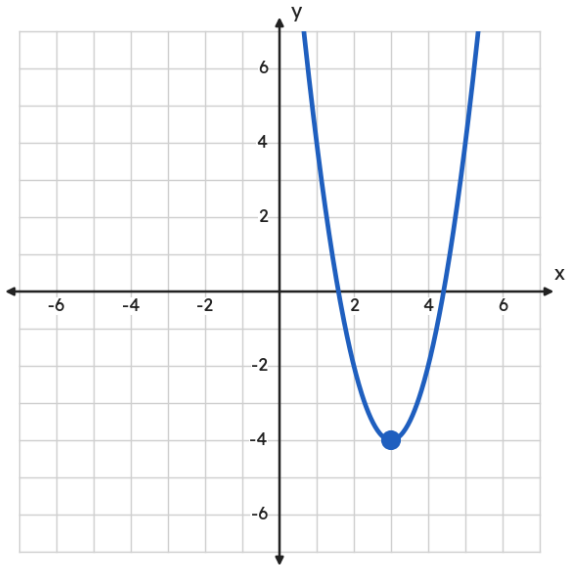
4. Graph $y = -x^2 + 4x - 1$.



vertex (2, 3); axis x = 2; y-intercept (0, -1); maximum 3

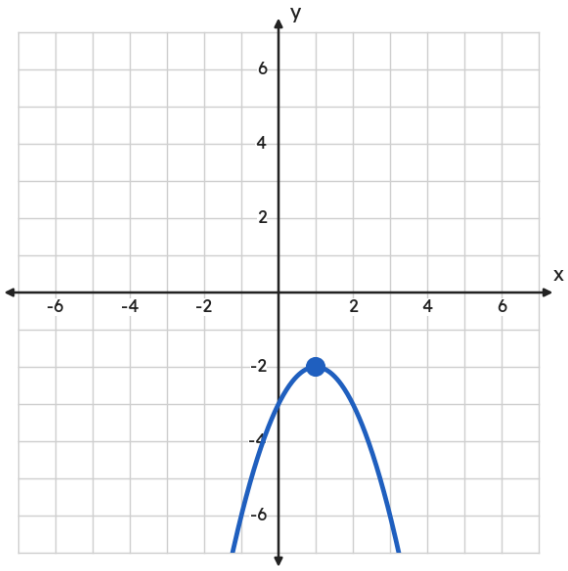
Features Forms Quadratic Functions - Medium - Answer Key

5. Graph $y = 2x^2 - 12x + 14$.



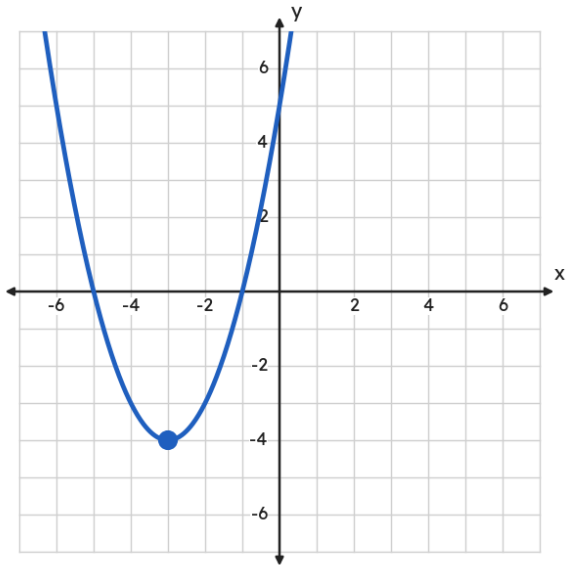
vertex (3, -4); axis x = 3; y-intercept (0, 14); minimum -4

6. Use the graph to give the vertex, the axis of symmetry, and the maximum or minimum value.



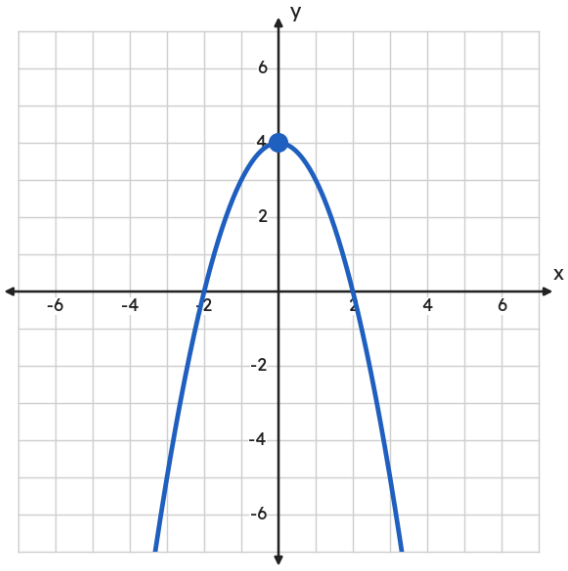
vertex (1, -2); axis x = 1; maximum value -2

7. Graph $y = (x + 5)(x + 1)$.



x-intercepts -5 and -1; axis x = -3; vertex (-3, -4)

8. Graph $y = -x^2 + 4$.



vertex (0, 4); axis x = 0; y-intercept (0, 4); maximum 4