Quadratics 1 7/27

Find the vertex and axis of symmetry:

1) y = x2 + 4x - 7 2) y = 3x2 - 18x + 1 3) y = 2x2 + 3x - 4

Find the x and y intercepts

4) y = -x2 - 2x - 1 5) y = x2 + x - 4 6) y = x2 + 4x - 5

Graph each quadratic function, label vertex and intercepts:

7) y = x2 -2x - 3 8) y = 2x2 + 2x - 4 9) y = x2 + 4x - 8

Tell whether each statement is sometimes, always, or never true.

10. The graphs of f(x) = ax2 and g(x) = -ax2 have the same width

11. The function f(x) =ax2 + c has three zeros (intercepts)

12. The graph of y = ax2 + 1 has its vertex at the origin

13. The graph of y = -x2 + c intersects the x-axis