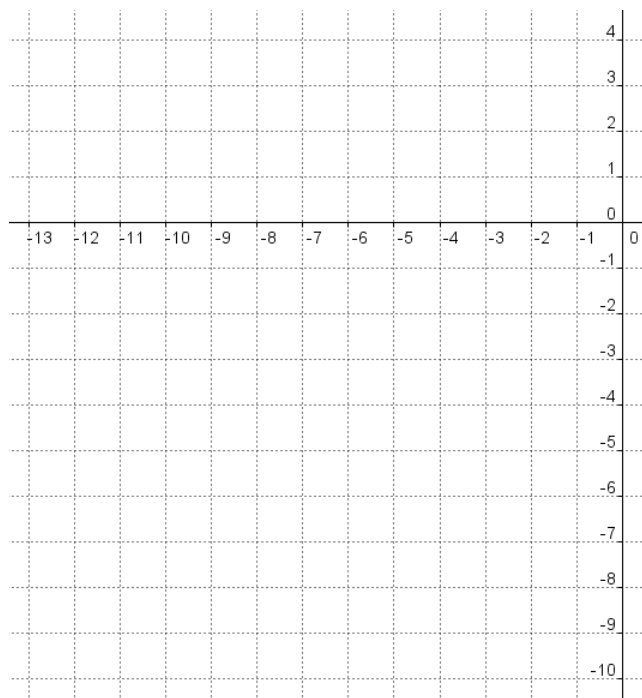
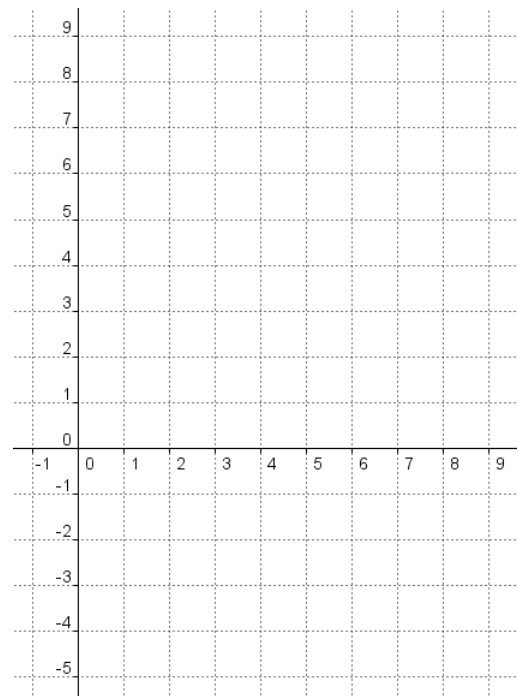


Practice worksheet – Determining the key properties of a parabola

1. Determine the axis of symmetry, vertex, x-intercepts and step pattern for the quadratic relation $y = 0.5x^2 + 7x + 15$. Graph the parabola on the grid below.



2. Convert $y = -3x^2 + 24x - 40$ into vertex form by completing the square.
Then determine the x-intercepts, and graph the parabola on the grid below.

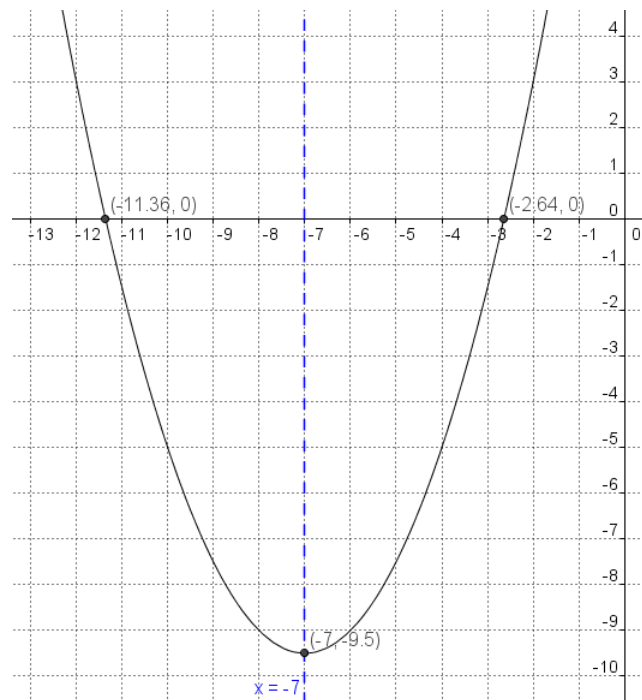


3. Sketch the quadratic relation $y = -6(x - 1.5)^2 + 28$. Clearly label the equation of the axis of symmetry and the coordinates of the vertex and x-intercepts.

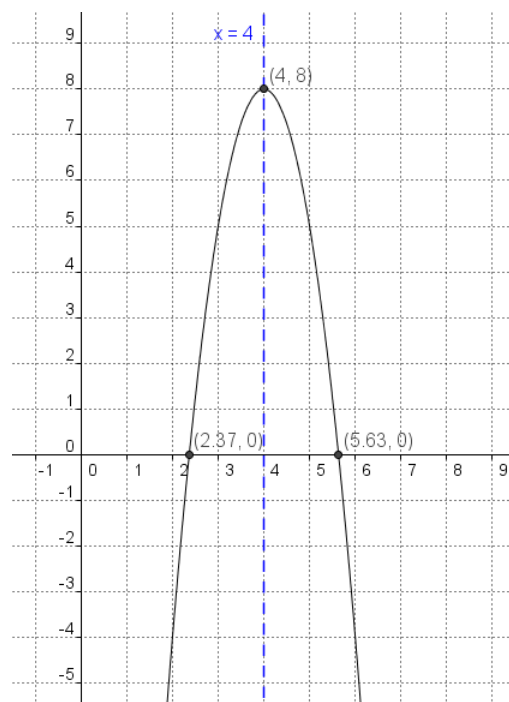
4. Sketch the quadratic relation $y = (2x + 5)(x - 6)$. Clearly label the equation of the axis of symmetry and the coordinates of the vertex and x-intercepts.

Answers:

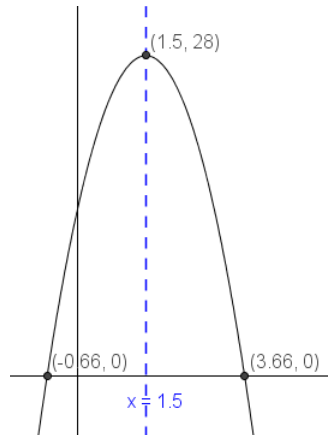
1.



2.



3.



4.

