1. Choose a word from this list to complete each sentence.
   lowest, parabola, vertex, highest, intercepts, zero
   a A maximum turning point is the _____ point on the graph.
   b The graph of a quadratic is called a _____.
   c The x-_____ are the points where the graph cuts the x-axis.
   d The axis of symmetry is a vertical line passing through the _____.
   e A minimum turning point is the _____ point on the graph.
   f The y-intercept is at x equals _____.

2. For each of the following graphs, state the:
   i   equation of the axis of symmetry   ii   coordinates of the turning point
   iii type of turning point (maximum or minimum)
   iv x-intercepts   v y-intercept

   a

   b

   c
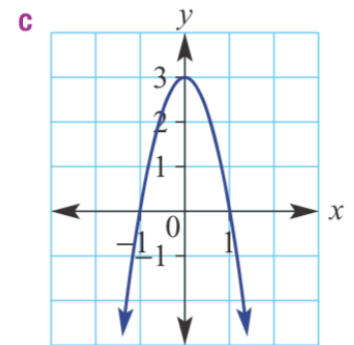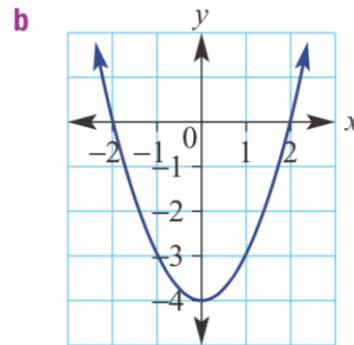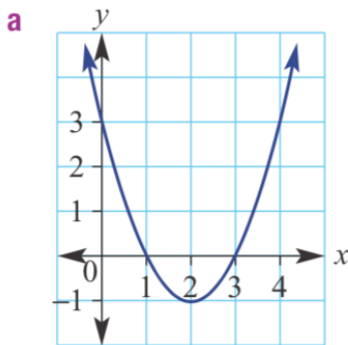
3. Use the quadratic rule $y = x^2 + 2x - 3$ to complete these tasks.
   a Complete the table of values.

x	−4	−3	−2	−1	0	1	2
y							

   b Draw a set of axes using a scale that suits the numbers in your table. Then plot the points to form a parabola.
   c State these features.
   i   Type of turning point   ii   Coordinates of the turning point   iii Axis of symmetry
   iv   The y-intercept   v   The x-intercepts

4. A parabola has a turning point at $(1, 3)$ and an x-intercept at 0.
   a What is the equation of its axis of symmetry?
   b What is the other x-intercept?