Practice worksheet | Quadratics and polynomial graphs

# Vertex/intercept/axis features

Name: _____ Date: _____

6 questions | 14 marks

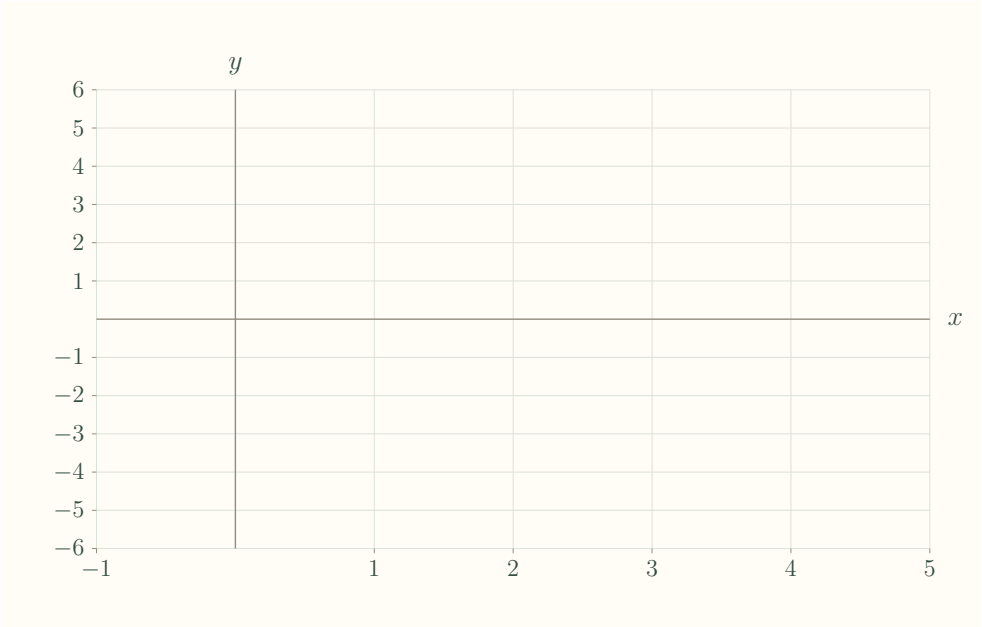
**1.** State vertex/axis for $y = (x-5)^2 + 2$. [2 marks]

**2.** Find the y-intercept of $y = -2(x+1)^2 + 8$. [2 marks]

**3.** Find x-intercepts of $y = (x-1)^2 - 9$. [2 marks]

**4.** Find the vertex of $y = x^2 + 6x + 4$. [2 marks]

**5.** Sketch $y = -(x-2)^2 + 4$, labelling vertex/intercepts. [4 marks]




**6.** Give domain/range of $y = 3(x+1)^2 - 6$ for real $x$. [2 marks]