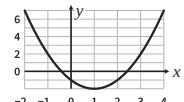
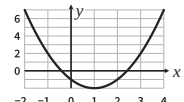


a Find the roots of $y = (2x + 1)(x - 4)$ $x = -\frac{1}{2}, x = 4$ a root when x has a coefficient	b Find the roots of $y = 2x^2 - 7x + 3$ $x = \frac{1}{2}, x = 3$ factorising when a is not 1	c Find the y intercept of $y = (x - 3)(x + 2)$ $(0, -6)$ the y intercept of a factorised form	d Find the line of symmetry of $y = x^2 - 8x + 7$ $x = 4$ line of symmetry from the equation
e Find the turning point of $y = 5 - (x - 1)^2$ $(1, 5)$ a maximum in completed square form	f Find the turning point of $y = x^2 - 3x + 1$ $(\frac{3}{2}, -\frac{5}{4})$ a turning point with an odd x term	g Find the turning point of $y = 2x^2 - 12x + 5$ $(3, -13)$ completing the square when a is not 1	h How many times does $y = x^2 - 4x + 7$ cross the x axis? 0 no roots: turning point above the axis
i Use the graph to solve $x^2 - 2x - 1 = 2$  $x = -1, x = 3$ solving $f(x) = k$ from a graph	j $y = x^2 + bx + c$ has roots $x = 2$ and $x = 5$. Find b and c . $b = -7, c = 10$ the equation from its roots	k $y = x^2 + bx + c$ has turning point $(3, -4)$. Find b and c . $b = -6, c = 5$ the equation from its turning point	l $y = x^2 + 6x + k$ touches the x axis. Find k . $k = 9$ touching the x axis: find k

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