Quadratic Graphs

Fill in the missing information

	$y = ax^2 + bx + c$ form	Factorised form	$y = a(x-b)^2 + c$ form	Co-ordinates of x intercepts	Co-ordinates of y intercept	Co-ordinates of turning point
Example	$y = x^2 + x - 6$	$y = (x+3)(x-2)$	$y = (x - \frac{1}{2})^2 - \frac{25}{4}$	(-3,0) (2,0)	(0.-6)	$\left(\frac{1}{2}, -\frac{25}{4}\right)$
1	$y = x^2 + 2x - 8$					
2.		$y = (2x+3)(x-4)$				
3.			$y = (x-3)^2 - 4$			
4			$y = 2(x+3)^2 - 8$			
5				(5,0) (-1,0)	(0,-10)	
6				$\left(-\frac{1}{2}, 0\right)$ $(-3,0)$		$\left(-\frac{7}{4}, -\frac{43}{4}\right)$

Quadratics Answers

	$y = ax^2 + bx + c$ form	Factorised form	$y = a(x-b)^2 + c$ form	Co-ordinates of x intercepts	Co-ordinates of y intercept	Co-ordinates of turning point
Example	$y = x^2 + x - 6$	$y = (x+3)(x-2)$	$y = (x - \frac{1}{2})^2 - \frac{25}{4}$	(-3,0) (2,0)	(0.-6)	$\left(\frac{1}{2}, -\frac{25}{4}\right)$
1	$y = x^2 + 2x - 8$	$y = (x+4)(x-2)$	$y = (x+1)^2 - 9$	(-4,0) (2,0)	(0,-8)	(-1,-9)
2.	$y = 2x^2 - 5x - 12$	$y = (2x+3)(x-4)$	$y = 2(x - \frac{5}{4})^2 - \frac{121}{8}$	$(\frac{-3}{2}, 0)$ (4,0)	(0,-12)	$(\frac{5}{4}, \frac{-121}{8})$
3.	$y = x^2 - 6x + 5$	$y = (x-5)(x-1)$	$y = (x-3)^2 - 4$	(5,0) (1,0)	(0,5)	(3,-4)
4	$y = 2x^2 + 12x + 10$	$y = 2(x+1)(x+5)$	$y = 2(x+3)^2 - 8$	(-1,0) (-5,0)	(0,10)	(-3,-8)
5	$y = 2x^2 - 8x - 10$	$y = 2(x-5)(x+1)$	$y = 2[(x-2)^2 - 9]$	(5,0) (-1,0)	(0,-10)	$(0,-10)$
6	$y = x^2 + \frac{7}{2}x + \frac{3}{2}$	$y = (x + \frac{7}{4})^2 - \frac{43}{4}$	$y = \frac{1}{2}(2x+1)(x+3)$	$\left(\frac{-1}{2}, 0\right)$ $(-3,0)$	$(0, \frac{3}{2})$	$\left(\frac{-7}{4}, \frac{-43}{4}\right)$