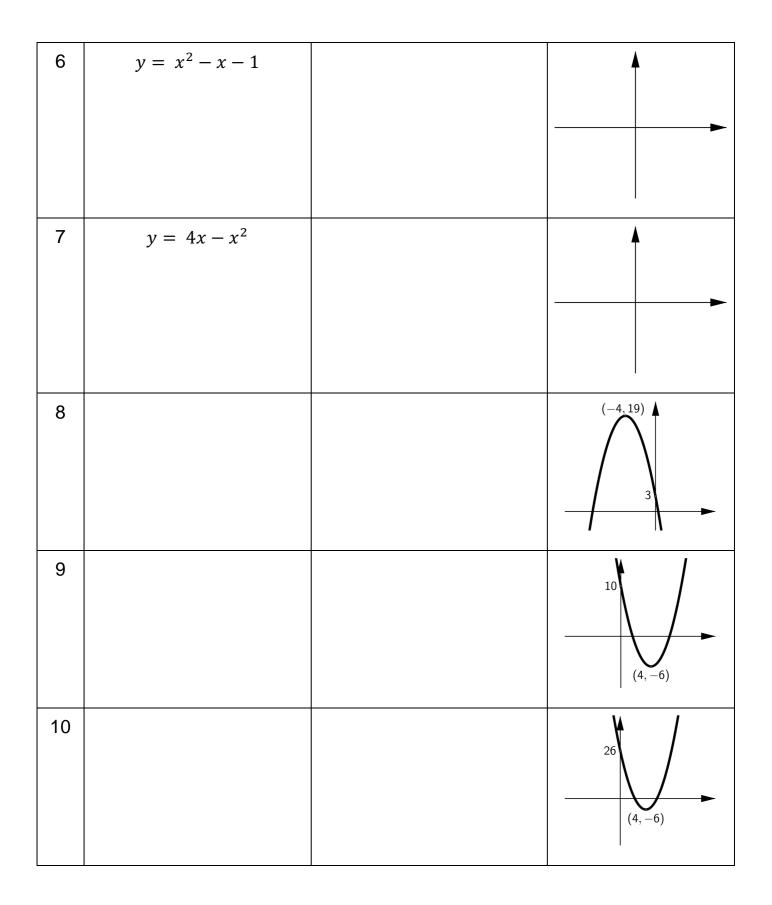
Completing the square and parabolas

Fill in all the blanks on this table so that for each parabola you have the equation in standard form, vertex form (completed square form) and a sketch. Your sketch must label both the turning point and the y-intercept.

	Standard Form	Vertex form	Sketch
1	$y = x^2 - 6x + 10$		
2		$y = (x-1)^2 + 4$	
3			(-2, -9)
4	$y = x^2 - 20x$		
5			9 (3, 0)



Completing the square and parabolas - Answers

Fill in all the blanks on this table so that for each parabola you have the equation in standard form, vertex form (completed square form) and a sketch. Your sketch must label both the turning point and the y-intercept.

	Standard Form	Vertex form	Sketch
1	$y = x^2 - 6x + 10$	$y = (x - 3)^2 + 1$	
2	$y = x^2 - 2x + 5$	$y = (x-1)^2 + 4$	5(1, 4)
3	$y = x^2 + 4x - 5$	$y = (x+2)^2 - 9$	(-2, -9)
4	$y = x^2 - 20x$	$y = (x - 10)^2 - 100$	0 (10, -100)
5	$y = x^2 - 6 + 9$	$y = (x - 3)^2$	9 (3, 0)

6	$y = x^2 - x - 1$	$y = \left(x - \frac{1}{2}\right)^2 - \frac{5}{4}$	$-1\left(\frac{1}{2},\frac{-5}{4}\right)$
7	$y = 4x - x^2$	$y = -(x-2)^2 + 4$	
8	$y = 3 - 8x - x^2$	$y = -(x+4)^2 + 19$	
9	$y = x^2 - 8x + 10$	$y = (x-4)^2 - 6$	
10	$y = 2x^2 - 16x + 26$	$y = 2(x-4)^2 - 6$	