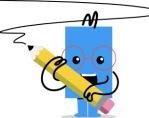


## mobius

## **Quadratic Equation Standard Form to Vertex (Coefficient 1)**



1 Complete the square and convert this to vertex form to find the vertex

to vertex form to find the vertex

2 Complete the square and convert this to vertex form to find the vertex

$$y = x^2 - 8x + 12$$

y =	$x^2$	+	6 <i>x</i>	+	1	0
J	-		• ••		_	_

Α	(-4, -4)	В	(-4, 4)	А	(3, 1)	В	(1, -3)	
С	(4, 4)	D	(4, -4)	С	(-3, 1)	D	(1, 1)	
Е	(1, 4)	F	(1, -4)	E	(-3, -1)			

3 Complete the square and convert this to vertex form to find the vertex

4

Complete the square and convert this to vertex form to find the vertex

$$y = x^2 - 8x + 20$$

$$y = x^2 + 8x + 15$$

А	(4, -4)	В	(1, 4)	A	(-4, -1)	В	(-4, 1)	
С	(4, 4)	D	(-4, 4)	С	(1, -1)	D	(-1, -4)	
				E	(4, -1)	F	(1, -4)	

5 Complete the square and convert this to vertex form to find the vertex

6

Complete the square and convert this to vertex form to find the vertex

$$y=x^2-6x+10$$

$$y = x^2 - 4x + 8$$

Α	(1, 3)	В	(3, 1)	А	(1, 2)	В	(2, -4)
С	(1, 1)	D	(3, -1)	С	(2, 4)	D	(1, 4)
Е	(-3, 1)			E	(-2, 4)	F	(4, 2)

7 Complete the square and convert this to vertex form to find the vertex

8

Complete the square and convert this to vertex form to find the vertex

$$y = x^2 + 6x + 12$$

y =	$x^2$	-6a	c +	12
-----	-------	-----	-----	----

Α	(1, 3)	В	(-3, -3)	Α	(1, 3)	В	(3, 3)	
С	(-3, 3)	D	(3, 3)	С	(3, -3)	D	(-3, 3)	
E	(1, -3)	F	(3, -3)					