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Use the quadratic formula or factorise

Problem	Answer	Problem	Answer
1. $x^2 - 5x + 6 = 0$		4. $x^2 + 2x + 5 = 0$	
2. $2x^2 - 4x - 6 = 0$		5. $3x^2 - 12 = 0$	
3. $x^2 + 4x + 4 = 0$		6. $-x^2 + 6x - 8 = 0$	

Notes

Answer key — Solve and find the vertex

#	Problem	Answer
1	$x^2 - 5x + 6 = 0$	$x = 2, 3$; vertex (2.5, -0.25)
2	$2x^2 - 4x - 6 = 0$	$x = 3, -1$; vertex (1, -8)
3	$x^2 + 4x + 4 = 0$	$x = -2$ (double); vertex (-2, 0)
4	$x^2 + 2x + 5 = 0$	$x = -1 \pm 2i$; vertex (-1, 4)
5	$3x^2 - 12 = 0$	$x = \pm 2$; vertex (0, -12)
6	$-x^2 + 6x - 8 = 0$	$x = 2, 4$; vertex (3, 1)

Notes