

GCSE Exam Questions

Factorising (Mixed) | Algebra



GCSE Exam Questions: Factorising (Mixed)

1)	(a)	Factorise	9 <i>x</i> - 18	
			-	(1)
	(b)	Factorise fully	$16x^2 + 20xy$	
				(2)
	(c)	Factorise	<i>a</i> ² - 16	
				(2) (5 marks)
2)	(a)	Factorise fully	12 <i>a</i> - 16 <i>ab</i>	
			-	
	(b)	Factorise	$x^2 - 3x - 10$	(1)
			-	(2)
	(c)	Factorise	2 <i>y</i> ² - 9 <i>y</i> - 5	(2)
			-	(2) (5 marks)
3)	(a)	Factorise fully	6 <i>y</i> ² - 24	
			-	
	(b)	Factorise	$x^2 + 3x - 28$	(2)
			-	
	(0)	Factorise	3 <i>y</i> ² - 4 <i>y</i> - 4	(2)
	(0)		<i>y</i> - y - y -	
				(2) (6 marks)



GCSE Exam Questions: Factorising (Mixed) Answers

	Question	Answer	Marks
1) (a)	Factorise 9x - 18	9(x - 2)	(1)
(b)	Factorise fully $16x^2 + 20xy$	$ \begin{array}{l} 4x () \\ 4x (4x + 5y) \end{array} $	(1) (1)
(c)	Factorise a^2 - 16	$(a \pm 4)(a \pm 4) (a + 4)(a - 4)$	(1) (1)
2) (a)	Factorise fully 12 <i>a</i> - 16 <i>ab</i>	4 <i>a</i> (3 - 4 <i>b</i>)	(1)
(b)	Factorise $x^2 - 3x - 10$	$(x \pm 2)(x \pm 5) (x + 2)(x - 5)$	(1) (1)
(c)	Factorise $2y^2 - 9y - 5$	$(2y \pm 1)(y \pm 5) (2y + 1)(y - 5)$	(1) (1)
3) (a)	Factorise fully $6y^2 - 24$	$ \begin{array}{r} 6(y^2 - 4) \\ 6(y + 2)(y - 2) \end{array} $	(1) (1)
(b)	Factorise $x^2 + 3x - 28$	$(x \pm 4)(x \pm 7)$ (x - 4)(x + 7)	(1) (1)
(c)	Factorise $3y^2 - 4y - 4$	$(3y \pm 2)(y \pm 2)$ (3y + 2)(y - 2)	(1) (1)

Where to go next?

For more diagnostic questions, and GCSE maths revision resources and worksheets to support students in fixing any misconceptions take a look at the free Third Space Learning <u>GCSE maths revision</u> pages.

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