

## GCSE Exam Questions

Expand & Simplify | Algebra



**(2)** 

#### GCSE Exam Questions: Expand & Simplify

1) Expand and simplify

(a) -2(y+3)

(2)

**(b)** 3(x-2)+2(x+5)

(c) (2y - 3)(y + 2)

(2) (6 marks)

**2)** Expand and simplify

(a)  $(5 - x)^2$ 

(2)

**(b)** 5x(3x - 4) - 2x(2x - 3)

(3)

(5 marks)



#### GCSE Exam Questions: Expand & Simplify

- 3) Expand and simplify
  - (a) 3(2x 4y) + 4(x 5y)

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**(2)** 

**(b)**  $(x-2)^2(2x+1)$ 

(3)

(5 marks)

4) (a) Expand  $\sqrt{3}$  (4 - 2 $\sqrt{3}$ )

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(2)

**(b)** Expand and simplify

 $(\sqrt{3} - \sqrt{5})(\sqrt{3} + \sqrt{5})$ 

(3)

(5 marks)



#### GCSE Exam Questions: Expand & Simplify Answers

	Question	Answer	Marks
1)	Expand and simplify:		
(a)	2(y+3)	$2y \pm 6$ $2y - 6$	(1) (1)
(b)	3(x-2) + 2(x+5)	3x - 6 + 2x + 10 $5x + 4$	(1) (1)
(c)	(2y-3)(y+2)	$2y^2 - 3y + 4y - 6$ $2y^2 + y - 6$	(1) (1)
2)	Expand and simplify:		ĺ
(a)	$(5-x)^2$	$25 - 5x - 5x + x^2$ $x^2 - 10x + 25$	(1) (1)
(b)	5x(3x - 4) - 2x(2x - 3)	$     15x^2 - 20x      4x^2 + 6x                                  $	(1) (1) (1)
3)	Expand and simplify:		
(a)	3(2x - 4y) + 4(x - 5y)	6x - 12y + 4x - 20y 10x - 32y	(1) (1)
(b)	$(x-2)^2(2x+1)$	$x^{2} - 4x + 4$ $2x^{3} - 8x^{2} + 8x + x^{2} - 4x + 4$ $2x^{3} - 7x^{2} + 4x + 4$	(1) (1) (1)
4) (a)	Expand: $\sqrt{3} (4 - 2\sqrt{3})$	$2 \times \sqrt{3} \times \sqrt{3} = 2 \times 3 = 6$ $4 \sqrt{3} - 6$	(1) (1)
(b)	Expand and simplify: $(\sqrt{3} - \sqrt{5})(\sqrt{3} + \sqrt{5})$	$\sqrt{9} + \sqrt{15} - \sqrt{15} - \sqrt{25}$ $\sqrt{9} = 3 \text{ and } \sqrt{25} = 5$ $-2$	(1) (1) (1)

### Where to go next?

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