

Expanding Double Brackets

For Pearson Edexcel GCSE Mathematics (1MA1) • Foundation tier

Name _____

Total marks: **29**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

1 Expand and simplify $(x + 2)(x + 6)$

.....
(2)

(Total for Question 1 is 2 marks)

2 Expand and simplify $(n + 7)(n - 3)$

.....
(2)

(Total for Question 2 is 2 marks)

3 Expand and simplify $(x - 4)(x - 5)$

.....
(2)

(Total for Question 3 is 2 marks)

4 Expand and simplify $(y + 6)^2$

.....
(2)

(Total for Question 4 is 2 marks)

5 Expand and simplify $(x - 7)^2$

.....
(2)

(Total for Question 5 is 2 marks)

6 Expand and simplify $(2x + 5)(3x - 1)$

.....
(2)

(Total for Question 6 is 2 marks)

7 Expand and simplify $(4x - 3)(x + 2)$

.....
(2)

(Total for Question 7 is 2 marks)

8 Expand and simplify $(x + 8)(x - 8)$

.....
(2)

(Total for Question 8 is 2 marks)

- 9 The diagram shows a rectangle.
All measurements are in centimetres.

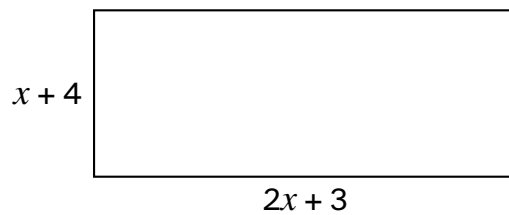


Diagram **NOT** accurately drawn

Show that the area of the rectangle, in cm^2 , can be written as $2x^2 + 11x + 12$

(2)

(Total for Question 9 is 2 marks)

- 10 Ben expands $(x + 3)^2$
He gets $x^2 + 9$

Explain the mistake Ben has made.

(1)

(Total for Question 10 is 1 mark)

11 Show that $(x + 5)(x - 2) - 3x \equiv x^2 - 10$

(3)

(Total for Question 11 is 3 marks)

12 Expand and simplify $(2x - 1)^2$

.....
(2)

(Total for Question 12 is 2 marks)

13 Write numbers in the boxes to make this identity correct.

$$(x + \boxed{})(x + \boxed{}) \equiv x^2 + 9x + 20$$

(2)

(Total for Question 13 is 2 marks)

- 14 The diagram shows a small square inside a large square. All measurements are in centimetres.

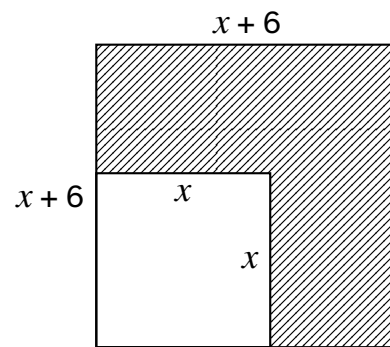


Diagram **NOT** accurately drawn

Find an expression, in terms of x , for the area of the shaded region.
Give your answer in its simplest form.

..... cm^2
(3)

(Total for Question 14 is 3 marks)