

# Expanding Single Brackets

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

Name \_\_\_\_\_

Total marks: **38**

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

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**1** (a) Expand  $5(2m - 3)$

.....  
(1)

(b) Expand  $2(a + d)$

.....  
(1)

**(Total for Question 1 is 2 marks)**

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**2** (a) Expand  $3(4 - 2x)$

.....  
(1)

(b) Expand  $7(p + q - 2)$

.....  
(1)

**(Total for Question 2 is 2 marks)**

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**3** (a) Expand  $y(y + 5)$

.....  
(1)

(b) Expand  $4e(e + 2)$

.....  
(1)

**(Total for Question 3 is 2 marks)**

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

.....  
(2)

**(Total for Question 4 is 2 marks)**

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

.....  
(2)

**(Total for Question 5 is 2 marks)**

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**6** Ben expands  $3(2x - 4)$

He gets  $6x - 4$

Explain what Ben has done wrong.

.....  
(1)

**(Total for Question 6 is 1 mark)**

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**7** Expand and simplify  $6(k + 2) - 3(2 - k)$

.....  
(2)

**(Total for Question 7 is 2 marks)**

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**8** (a) Expand  $x(2x^2 + 7)$

.....  
(1)

(b) Expand  $3p(p^2 + 4p)$

.....  
(2)

**(Total for Question 8 is 3 marks)**

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- 9 A rope is cut into three pieces,  $A$ ,  $B$  and  $C$ .  
Piece  $A$  is  $x$  cm long.  
Piece  $B$  is 4 cm shorter than piece  $A$ .  
Piece  $C$  is 3 times as long as piece  $B$ .

(a) Write down an expression, in terms of  $x$ , for the length of piece  $B$ .

.....  
(1)

(b) Write down an expression, in terms of  $x$ , for the length of piece  $C$ .  
Give your answer without brackets.

.....  
(1)

(c) Find an expression, in terms of  $x$ , for the total length of the rope.  
Give your answer in its simplest form.

.....  
(2)

**(Total for Question 9 is 4 marks)**

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**10** Expand and simplify  $4(2y - 3) + 3(y + 5)$

.....

(2)

**(Total for Question 10 is 2 marks)**

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

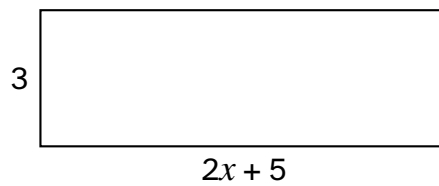


Diagram **NOT** accurately drawn

- (a) Show that the area of the rectangle, in  $\text{cm}^2$ , can be written as  $6x + 15$

(1)

- (b) The area of the rectangle is  $45 \text{ cm}^2$   
Work out the perimeter of the rectangle.

..... cm  
(4)

**(Total for Question 11 is 5 marks)**

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

.....  
(2)

**(Total for Question 12 is 2 marks)**

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**13** Write numbers in the boxes to make this statement correct.

$$5(2x - \boxed{\phantom{00}}) = \boxed{\phantom{00}}x - 15$$

(2)

**(Total for Question 13 is 2 marks)**

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**14** Show that  $5(x + 2) + 3(x - 4) = 2(4x - 1)$

(2)

**(Total for Question 14 is 2 marks)**

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- 15** The diagram shows a small rectangle cut out of a large rectangle.  
All measurements are in centimetres.

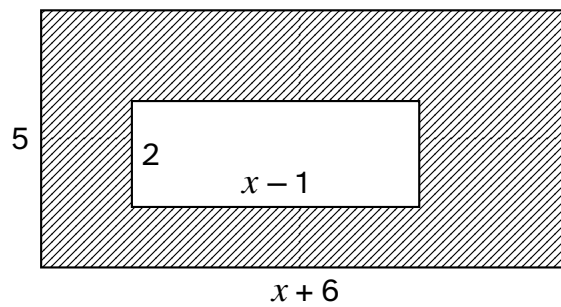


Diagram **NOT** accurately drawn

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

.....  $\text{cm}^2$   
(3)

**(Total for Question 15 is 3 marks)**

- 16** Expand and simplify  $3x(x + 4) - 2x(x - 1)$

.....  
(2)

**(Total for Question 16 is 2 marks)**