

GCSE Maths: Expanding single brackets (Foundation): worksheet

GCSE Maths - Algebra Basics - Foundation - Lesson 7.4

Name: _____

Date: _____

Score: _____

13 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch07-algebra-basics/foundation/expanding-single-brackets/

Exercise 7D Expanding single brackets Non-calculator

1 Expand each bracket.

(a) $4(x + 3)$

Answer:

(b) $5(y - 2)$

Answer:

(c) $2(3a + 1)$

Answer:

(d) $7(2 - b)$

Answer:

(e) $6(2p + 3q)$

Answer:

(f) $9(1 + 2c)$

Answer:

2 Expand each bracket.

(a) $x(x + 5)$

Answer:

(b) $y(y - 3)$

Answer:

(c) $a(2a + 1)$

Answer:

(d) $m(4 - m)$

Answer:

3 Expand each bracket.

(a) $3x(x + 2)$

Answer:

(b) $2a(a - 4)$

Answer:

(c) $5y(2y + 3)$

Answer:

(d) $4m(3m - 1)$

Answer:

4 Expand each bracket.

(a) $-2(x + 3)$

Answer:

(b) $-5(a - 1)$

Answer:

(c) $-x(x - 4)$

Answer:

(d) $-3(2y - 5)$

Answer:

5 Expand and simplify.

(a) $3(x + 1) + 2(x + 4)$

Answer:

(b) $4(a + 2) + 3(a - 1)$

Answer:

(c) $5(y + 3) + 2(y - 6)$

Answer:

(d) $2(3x + 1) + 5(x + 2)$

Answer:

6 Expand and simplify.

(a) $5(x + 2) - 3(x + 1)$

Answer:

(b) $4(a + 5) - 2(a + 3)$

Answer:

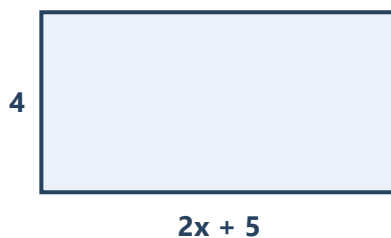
(c) $7(y + 1) - 4(y - 2)$

Answer:

(d) $3(2m + 1) - 2(m - 4)$

Answer:

7 The rectangle has width 4 cm and length $(2x + 5)$ cm. Write an expression for its area and expand the bracket.



Answer:

- 8** An adult ticket costs $\pounds a$. A child ticket costs $\pounds 5$ less than an adult ticket. A family buys 2 adult tickets and 3 child tickets. Show that the total cost is $\pounds(5a - 15)$, by writing an expression and simplifying it.

Answer:

- 9** Show that $3(x + 4) - 3x$ is always equal to 12, whatever the value of x .

Answer:

- 10** Sam expands $5(x - 3)$ and gets $5x - 3$. Find his mistake and write the correct answer.

Answer:

- 11** Zara says that $-3(x - 2) = -3x - 6$. Is she right? Explain.

Answer:

- 12** Expand and simplify each expression.

(a) $x(x + 4) - 2(x - 3)$

Answer:

(b) $2a(a + 1) + 3(a - 5)$

Answer:

(c) $y(2y - 1) - y(y + 3)$

Answer:

- 13** Find the missing term in each statement.

(a) $3(x + ?) = 3x + 21$

Answer:

(b) $?(2x - 5) = 8x - 20$

Answer:

(c) $x(? + 7) = x^2 + 7x$

Answer: