

Interleaved: expanding and factorising

1

Write $3(2x - 5)$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

brackets, so multiply out: $3 \times 2x$ and 3×-5

Answer $6x - 15$

2

Write $x^2 + 7x + 12$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

3

Write $(x + 5)(x - 2)$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

4

Write $12x + 18$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

5

Write $4x(x - 3)$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

6

Write $x^2 - 2x - 15$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

7

Write $10x^2 + 15x$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

Factorise a quadratic

Answer _____

8

Write $(2x + 1)(x + 4)$ in its other form.

Which method? **Expand one bracket**

Expand two brackets Take out a factor

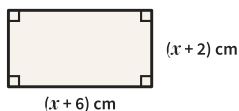
Factorise a quadratic

Answer _____

Interleaved: expanding and factorising *further practice*

9

A rectangle is $(x + 6)$ cm long and $(x + 2)$ cm wide. Write an expression for its area without brackets.



Answer _____

10

The area of a rectangle is $x^2 + 9x + 20$ cm². Find expressions for its length and width.

Answer _____

11

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

Answer _____

12

Factorise fully $8x^2y + 12xy^2$.

Answer _____

13

Factorise $x^2 - 49$.

Answer _____

14

Expand and simplify $(x - 3)^2$.

Answer _____

15

Show that $5(2x + 1) - 3(x - 4)$ simplifies to $7x + 17$.

Answer _____

16

Mia factorises $x^2 + 5x + 6$ and gets $x(x + 5) + 6$. Explain why this is not factorised, and factorise it.

Answer _____