

Name: _____

Exam Style Questions

Expanding Two Brackets



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 14



1. Expand and simplify $(y + 3)(y + 5)$

$$y^2 + 5y + 3y + 15$$

$$\frac{y^2 + 8y + 15}{(2)}$$

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

$$x^2 - x + 5x - 5$$

$$\frac{x^2 + 4x - 5}{(2)}$$

3. Expand and simplify $(w - 2)(w - 7)$

$$w^2 - 7w - 2w + 14$$

$$\frac{w^2 - 9w + 14}{(2)}$$

4. Expand and simplify $(x - 10)(x + 3)$

$$x^2 + 3x - 10x - 30$$

$$\frac{x^2 - 7x - 30}{(2)}$$

5. Expand and simplify $(2y + 1)(y + 3)$

$$2y^2 + 6y + y + 3$$

$$\underline{2y^2 + 7y + 3}$$

(2)

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

$$6x^2 + 9x - 4x - 6$$

$$\underline{6x^2 + 5x - 6}$$

(2)

7. Expand and simplify $(5y - 1)(y - 2)$

$$5y^2 - 10y - y + 2$$

$$\underline{5y^2 - 11y + 2}$$

(2)

8. Expand and simplify $(x - 7)^2$

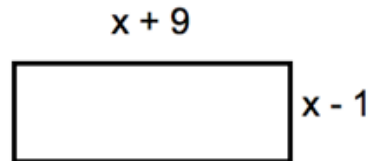
$$(x - 7)(x - 7)$$

$$x^2 - 7x - 7x + 49$$

$$\underline{x^2 - 14x + 49}$$

(2)

9. A rectangle is shown below.



The length of the rectangle is $x + 9$ cm.

The width of the rectangle is $x - 1$ cm.

Form an expression for the area of the rectangle.

$$(x+9)(x-1)$$

$$x^2 - x + 9x - 9$$

$$\frac{x^2 + 8x - 9}{(3)}$$

10. Expand and simplify $(3 + g)(5 - g)$

$$15 - 3g + 5g - g^2$$

$$\frac{15 + 2g - g^2}{(2)}$$

11. Expand and simplify $(y^2 + y)(y + 3)$

$$y^3 + 3y^2 + y^2 + 3y$$

$$y^3 + 4y^2 + 3y$$

(2)

12. Expand and simplify $(x - 3)(x + 3)$

$$x^2 + 3x - 3x - 9$$

$$x^2 - 9$$

(2)

13. Expand and simplify $(w + 3)(w + 4) + (w + 2)(w + 7)$

$$(w^2 + 4w + 3w + 12) + (w^2 + 7w + 2w + 14)$$

$$(w^2 + 7w + 12) + (w^2 + 9w + 14)$$

$$= 2w^2 + 16w + 26$$

$$2w^2 + 16w + 26$$

(3)

14. Expand and simplify $(3y - 5)(y + 4) - (y - 3)(y - 5)$

$$(3y^2 + 12y - 5y - 20) - (y^2 - 5y - 3y + 15)$$

$$(3y^2 + 7y - 20) - (y^2 - 8y + 15)$$

$$3y^2 + 7y - 20 - y^2 + 8y - 15$$

$$2y^2 + 15y - 35$$

(3)