

Name:

Exam Style Questions

## Expanding Two Brackets

Equipment needed: Calculator, pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

Video 14



Answers and Video Solutions



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



.....  
(2)

---

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



.....  
(2)

---

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



.....  
(2)

---

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



.....  
(2)

5. Expand and simplify  $(x - 4)(x + 6)$



.....  
(2)

---

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



.....  
(2)

---

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



.....  
(2)

---

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



.....  
(2)

9. Expand and simplify  $(4x + 1)(3x - 5)$



.....  
(2)

---

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



.....  
(2)

---

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



.....  
(2)

12. Expand and simplify  $(7x - 20)(9x - 10)$



.....  
(2)

---

13. Expand and simplify  $(2x + 5)^2$



.....  
(2)

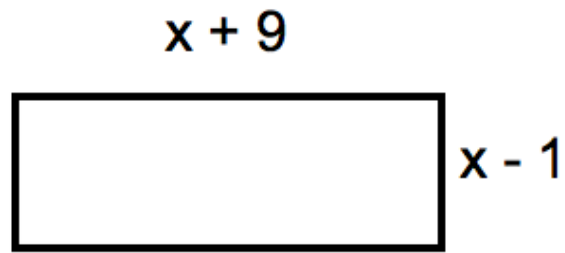
---

14. Expand and simplify  $(4x - 3)^2$



.....  
(2)

15. A rectangle is shown below.



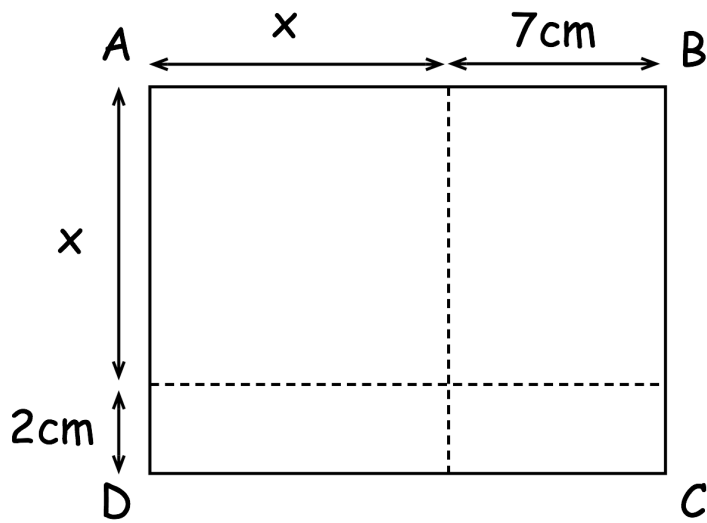
The length of the rectangle is  $x + 9$  cm.

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

Form an expression for the area of the rectangle.

.....  
(3)

16. Rectangle ABCD is shown below.



The area rectangle ABCD is  $230\text{cm}^2$

Show that  $x^2 + 9x = 216$

(4)

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



.....  
(2)

18. Micah correctly expands and simplifies  $(2x + 11)(x - 3)$



Circle the term that is part of his answer

$8x$

$-5x$

$5x$

$-8x$

(1)

---

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



.....  
(2)

---

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



.....  
(3)



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



.....  
(3)

---

22. Expand and simplify  $(4y^2 + 5)(2y + 1) - 3y(y^2 - 6)$



.....  
(4)

23.  $(x + c)(x + d) \equiv x^2 + px + 72$



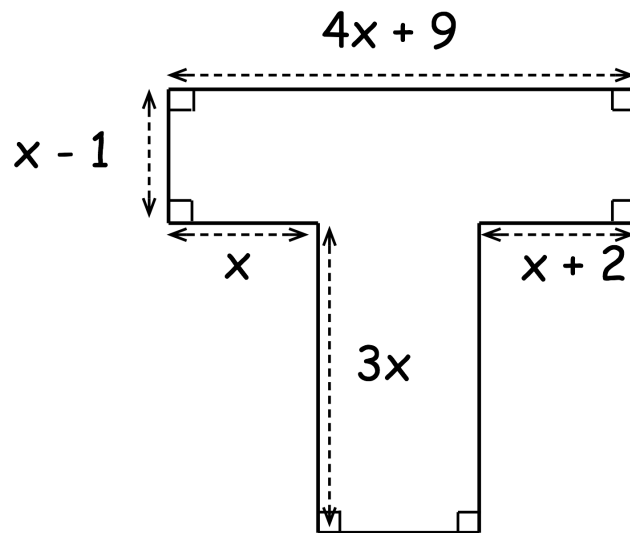
$c$  is twice the value of  $d$

Find two possible values of  $p$

$p = \dots\dots\dots$  or  $p = \dots\dots\dots$

**(3)**

24.



The area of the shape shown above is  $A$ .

Show that  $A = 10x^2 + 26x - 9$

(4)