Multiple choice questions - Expanding brackets and substitution

Year: Year 7 · 10

Question 1 Expand $4(x+5)$.

- ◯ **A.** $4x+20$
- ◯ **B.** $4x+5$
- ◯ **C.** $x+20$
- ◯ **D.** $9x$

Question 2 Expand $3(2a-1)$.

- ◯ **A.** $6a-1$
- ◯ **B.** $6a-3$
- ◯ **C.** $5a-3$
- ◯ **D.** $6a+3$

Question 3 Expand $x(x-4)$.

- ◯ **A.** $x-4x$
- ◯ **B.** $2x-4$
- ◯ **C.** x^2-4x
- ◯ **D.** x^2-4

Question 4 Expand $-(x+7)$.

- ◯ **A.** $-x+7$
- ◯ **B.** $x-7$
- ◯ **C.** $-7x$
- ◯ **D.** $-x-7$

Question 5 Expand and simplify $2(x+3)+4$.

- ◯ **A.** $2x+10$
- ◯ **B.** $2x+7$
- ◯ **C.** $6x+4$
- ◯ **D.** $2x+12$

Question 6 Expand and simplify $3(x+1)-(x-2)$.

- ◯ **A.** $2x+1$
- ◯ **B.** $2x+5$
- ◯ **C.** $4x+1$

- **D.** $2x - 1$

Question 7 Find $2(x + 3)$ when $x = 4$.

- **A.** 11
- **B.** 10
- **C.** 14
- **D.** 24

Question 8 The formula is $P = 2l + 2w$. Find P when $l = 6$ and $w = 3$.

- **A.** 9
- **B.** 36
- **C.** 15
- **D.** 18

Question 9 Which expression is equivalent to $5(a + 2)$?

- **A.** $5a + 10$
- **B.** $5a + 2$
- **C.** $a + 10$
- **D.** $5a + 7$

Question 10 Find $x^2 + 3x$ when $x = 2$.

- **A.** 7
- **B.** 10
- **C.** 12
- **D.** 5

Answer grid - Expanding brackets and substitution

Year: Year 7

Question	Answer	Explanation
1	**A**	Multiply both terms by 4.
2	**B**	3 x 2a = 6a and 3 x (-1) = -3.
3	**C**	x times x is x squared, and x times -4 is -4x.
4	**D**	A minus in front changes every sign.
5	**A**	2x + 6 + 4 = 2x + 10.
6	**B**	3x + 3 - x + 2 = 2x + 5.
7	**C**	2 x (4 + 3) = 14.
8	**D**	12 + 6 = 18.
9	**A**	Multiply both terms by 5.
10	**B**	4 + 6 = 10.