Multiple choice questions - Algebra: formulae, sequences and missing numbers

Year: Year 6 · 10

Question 1 What is the next term in 7, 12, 17, 22, ...?

- ◯ **A.** 25
- ◯ **B.** 26
- ◯ **C.** 27
- ◯ **D.** 32

Question 2 What is the rule for 100, 90, 80, 70, ...?

- ◯ **A.** add 10
- ◯ **B.** subtract 10
- ◯ **C.** divide by 10
- ◯ **D.** subtract 100

Question 3 If a = 5, what is 3a + 2?

- ◯ **A.** 10
- ◯ **B.** 17
- ◯ **C.** 15
- ◯ **D.** 35

Question 4 6 + n = 15. What is n?

- ◯ **A.** 21
- ◯ **B.** 9
- ◯ **C.** 10
- ◯ **D.** 8

Question 5 The nth term is 2n + 1. What is the 4th term?

- ◯ **A.** 8
- ◯ **B.** 9
- ◯ **C.** 10
- ◯ **D.** 6

Question 6 4x = 36. What is x?

- ◯ **A.** 32

- ◯ **B.** 40
- ◯ **C.** 9
- ◯ **D.** 8

Question 7 Which pair of whole numbers makes a + b = 9 true?

- ◯ **A.** (4, 6)
- ◯ **B.** (3, 5)
- ◯ **C.** (4, 5)
- ◯ **D.** (2, 8)

Question 8 The perimeter of a rectangle is P = 2l + 2w. Find P when l = 5 and w = 3.

- ◯ **A.** 15
- ◯ **B.** 16
- ◯ **C.** 30
- ◯ **D.** 13

Question 9 What is the missing term in 3, 7, __, 15?

- ◯ **A.** 9
- ◯ **B.** 10
- ◯ **C.** 11
- ◯ **D.** 12

Question 10 Which expression means 7 more than n?

- ◯ **A.** 7n
- ◯ **B.** n - 7
- ◯ **C.** n + 7
- ◯ **D.** n ÷ 7

Answer grid - Algebra: formulae, sequences and missing numbers

Year: Year 6

Question	Answer	Explanation
1	**C**	The sequence goes up by 5: 22 + 5 = 27.
2	**B**	Each term is 10 less.
3	**B**	3 x 5 = 15, then + 2 = 17.
4	**B**	n = 15 - 6 = 9.
5	**B**	2 x 4 + 1 = 9.
6	**C**	x = 36 ÷ 4 = 9.
7	**C**	4 + 5 = 9. The others add to 10, 8 and 10.
8	**B**	2 x 5 + 2 x 3 = 10 + 6 = 16.
9	**C**	The sequence goes up by 4: 7 + 4 = 11.
10	**C**	More than means add.