Multiple choice questions - Negative numbers, factors, multiples and primes

Year: Year 7 · 10

Question 1 Work out $-6 + 2$.

- ◯ **A.** -4
- ◯ **B.** 4
- ◯ **C.** -8
- ◯ **D.** 8

Question 2 Work out $3 - (-5)$.

- ◯ **A.** -2
- ◯ **B.** 8
- ◯ **C.** 2
- ◯ **D.** -8

Question 3 Work out $(-4) \times (-7)$.

- ◯ **A.** -28
- ◯ **B.** -11
- ◯ **C.** 28
- ◯ **D.** 11

Question 4 Which number is prime?

- ◯ **A.** 33
- ◯ **B.** 39
- ◯ **C.** 51
- ◯ **D.** 31

Question 5 Which is the full list of factors of 20?

- ◯ **A.** 1, 2, 4, 5, 10, 20
- ◯ **B.** 1, 2, 4, 5, 20
- ◯ **C.** 2, 4, 5, 10
- ◯ **D.** 20, 40, 60, 80

Question 6 The prime factorisation of 90 is

- ◯ **A.** $2 \times 3 \times 5$
- ◯ **B.** $2 \times 3^2 \times 5$
- ◯ **C.** $2^2 \times 3 \times 5$

- ◯ **D.** 9×10

Question 7 What is the HCF of 16 and 40?

- ◯ **A.** 4
- ◯ **B.** 80
- ◯ **C.** 8
- ◯ **D.** 2

Question 8 What is the LCM of 9 and 12?

- ◯ **A.** 3
- ◯ **B.** 108
- ◯ **C.** 72
- ◯ **D.** 36

Question 9 Work out $5 + 2 \times 3^2$.

- ◯ **A.** 23
- ◯ **B.** 63
- ◯ **C.** 27
- ◯ **D.** 41

Question 10 What is $\sqrt{169}$?

- ◯ **A.** 14
- ◯ **B.** 13
- ◯ **C.** 84.5
- ◯ **D.** 12

Answer grid - Negative numbers, factors, multiples and primes

Year: Year 7

Question	Answer	Explanation
1	**A**	Start at -6 and move 2 right to reach -4.
2	**B**	Subtracting a negative means adding: 3 + 5 = 8.
3	**C**	Two negatives multiplied give a positive: 28.
4	**D**	33 = 3 x 11, 39 = 3 x 13 and 51 = 3 x 17. Only 31 has just two factors.
5	**A**	The pairs are 1 x 20, 2 x 10 and 4 x 5.
6	**B**	90 = 2 x 45 = 2 x 3 x 15 = 2 x 3 x 3 x 5.
7	**C**	Factors of 16: 1, 2, 4, 8, 16. 8 also divides 40 and is the largest such number.
8	**D**	Multiples of 12: 12, 24, 36. 36 is also a multiple of 9.
9	**A**	Indices: 9. Multiply: 18. Add: 5 + 18 = 23.
10	**B**	13 x 13 = 169.