

## Mathematical Operations

### Solution

1. **Answer(A):**  
 $11 + 9 - 4 \times 12 \div 6 = 32$   
 Putting ' $\div$ ' in place of ' $-$ ' vice-versa, we get  
 $11 + 9 \div 4 \times 12 - 6 = 32$   
 $11 + 94 \times 12 - 6 = 32$   
 $11 + 9 \times 3 - 6 = 32$   
 $11 + 27 - 6 = 32$  (Apply BODMAS)  
 $38 - 6 = 32$   
 $32 = 32$
2. **Answer(A):**  
 $11 \div 9 - 63 \div 7 \times 2$   
 Putting ' $\div$ ' in place of ' $+$ ' vice-versa  
 $11 + 9 - 63 \div 7 \times 2$   
 $11 + 9 - 9 \times 2$   
 $11 + 9 - 18$  (Apply BODMAS)  
 $20 - 18$   
 $2$
3. **Answer(D):**  
 $3 + 6 \div 2 \times 4 - 7 = 5$   
 Putting '6' in place value '3' vice-versa, we get  
 $6 + 3 \div 2 \times 4 - 7 = 5$   
 $6 + 3/2 \times 4 - 7 = 5$   
 $6 + 6 - 7 = 5$  (Apply BODMAS)  
 $12 - 7 = 5$   
 $5 = 5$
4. **Answer(A):**  
 $11 + 16 \times 12 \div 4 - 2 = 21$   
 Putting ' $\times$ ' in place of ' $-$ ' vice - versa, we get  
 $11 + 16 - 12 \div 4 \times 2 = 21$   
 $11 + 16 - 3 \times 2 = 21$   
 $11 + 16 - 6 = 21$   
 $27 - 6 = 21$  (apply BODMAS)  
 $21 = 21$
5. **Answer(B):**  
 $13 - 9 \times 2 \div 3 + 16 = 3$   
 Putting ' $-$ ' in place of ' $+$ ' vise-versa, we get  
 $13 + 9 \times 2 \div 3 - 16 = 3$   
 $13 + 9 \times 23 - 16 = 3$   
 $13 + 3 \times 2 - 16 = 3$   
 $13 + 6 - 16 = 3$
6. **Answer(C):**  
 $3 = 3$   
 $3 + 2 + 1 \times 4 - 7$   
 Interchang the numbers  
 $3 + 2 + 1 \times 7 - 4$  (Alply BODMAS)  
 $3 + 2 \times 7 - 4$   
 $3 + 14 - 4$   
 $17 - 4$   
 $13$
7. **Answer(D):**  
 $9 \times 11 \div 31 + 62 - 13 = 18$   
 Putting '+' in place of ' $\times$ ' vice-versa, we get  
 $9 + 11 \div 31 \times 62 - 13 = 18$   
 $9 + 11/31 \times 62 - 13 = 18$   
 $9 + 11 \times 2 - 13 = 18$  (Apply BODMAS)  
 $9 + 22 - 13 = 18$   
 $9 + 9 = 18$   
 $18 = 18$
8. **Answer(A):**  
 $6 + 3 \div 9 \times 7 - 5$   
 Putting '7' in place of '6' vice-versa we get  
 $7 + 3 \div 9 \times 6 - 5$  (Apply BODMAS)  
 $7 + 3/9 \times 6 - 5$   
 $7 + 2 - 5$   
 $4$
9. **Answer(C):**  
 $9 \div 11 + 11 \times 2 = 9$   
 Putting ' $\div$ ' in place of ' $+$ ' vice-versa we get  
 $9 + 11 \div 11 \times 2 = 9$   
 $9 + 11/11 \times 2 = 9$   
 $9 + 2 = 9$   
 $11 \neq 9$
10. **Answer(D):**  
 $11 + 13 - 24 \times 3 \div 2$   
 Interchanging the signs " $\times$ " and " $\div$ "  
 $11 + 13 - 24 \div 3 \times 2$   
 $11 + 13 - 16$   
 $24 - 16 = 8$
11. **Answer(A):**

$$9 \times 5 \div 10 + 30 = 24$$

Putting "+" in place of "×" vice versa we get

$$9 + 5 \div 10 \times 30 = 24$$

$$9 + 5/10 \times 30 = 24$$

$$9 + 15 = 24$$

12. **Answer(A):**

$$6 \div 3 \times 5 - 15 + 4 = 9$$

Interchanging the signs "-" and "÷"

$$6 - 3 \times 5 \div 15 + 4$$

$$6 - 3 \times 5/15 + 4$$

$$6 - 1 + 4$$

$$5 + 4 = 9$$

13. **Answer(C):**

$$9 - 11 + 26 \div 78 \times 27 = 11$$

Interchanging the signs "-" and "+"

$$9 + 11 - 26 \div 78 \times 27 = 11$$

$$9 + 11 - 26/78 \times 27 = 11$$

$$9 + 11 - 9 = 11$$

$$20 - 9 = 11$$

$$11 = 11$$

14. **Answer(B):**

$$5 - 9 + 16 \times 91 \div 13 = -98$$

Interchanging the sign "+" and "-"

$$5 + 9 - 16 \times 91 \div 13$$

$$5 + 9 - 16 \times 91/13$$

$$14 - 112 = -98$$

15. **Answer(B):**

$$6 \times 8 \div 32 + 64 - 11$$

Interchanging the sign "+" and "×"

$$6 + 8 \div 32 \times 64 - 11$$

$$6 + 8/32 \times 64 - 11$$

$$6 + 16 - 11$$

$$22 - 11 = 11$$

$$11 = 11$$

16. **Answer(A):**

$$6 \div 5 + 12 \times 4 - 7 = 26$$

Interchanging the sign ÷ and ×

$$6 \times 5 + 12 \div 4 - 7 = 26$$

$$6 \times 5 + 3 - 7 = 26$$

$$30 + 3 - 7 = 26$$

$$33 - 7 = 26$$

$$26 = 26$$

17. **Answer(C):**

$$4 \times 8 \div 2 =$$

Interchanging the sign ÷ and × and two numbers 2 and 8

$$4 \div 2 \times 8$$

$$4/2 \times 8$$

$$2 \times 8 = 16$$

18. **Answer(A):**

$$28 + 4 \times 16 \div 5 - 17 = 127$$

Interchanging the number "4" and "5" and sign "+" and "×"

$$28 \times 5 + 16 \div 4 - 17 = 127$$

$$28 \times 5 + 4 - 17 = 127$$

$$140 + 4 - 17 = 127$$

$$144 - 17 = 127$$

$$127 = 127$$

19. **Answer(A):**

$$45 - 87 \times 20 \div 5 + 29 = 50$$

45 - 87 ÷ 29 × 5 + 20 = 50 (Apply BODMAS)

$$45 - 87/29 \times 5 + 20 = 50$$

$$45 - 3 \times 5 + 20 = 50$$

$$45 - 15 + 20 = 50$$

$$30 + 20 = 50$$

$$50 = 50$$

20. **Answer(C):**

$$52 + 64 - 16 \div 36 \times 6 = 20$$

Putting '×' in place of '÷' vice-versa, we get

$$52 + 64 - 16 \times 36 \div 6 = 20 \text{ (Apply BODMAS)}$$

$$52 + 64 - 16 \times 6 = 20$$

$$52 + 64 - 96 = 20$$

$$116 - 96 = 20$$

$$20 = 20$$