



RAMAGYA SCHOOL, NOIDA
VII/MATHEMATICS/2018-19
OLYMPIAD PRACTICE WORKSHEET

(Concept based)

1. In a quiz, positive marks are given for correct answers and negative marks are given for incorrect answers. If Jack's scores in five successive rounds were 25, - 5, - 10, 15 and 10, what was his total at the end?
(A) 36 (B) 34 (C) 33 (D) 35
2. Commutative and associative properties are applicable in only
(A) Addition and subtraction (B) Addition and multiplication
(C) Subtraction and division (D) multiplication and division
3. According to a property, $a + (b + c) = (a + b) + c$. The property is
(A) Commutative (B) Associative (C) Distributive (D) Additive inverse
4. Multiplicative identity is
(A) 0 (B) 1 (C) -1 (D) reciprocal
5. If $25 \times (32 \times 4) = 3200$ then $32 \times (25 \times 4) =$ _____
(A) 6400 (B) 4800 (C) 6000 (D) 4000
6. What is the additive inverse of 20?
(A) -20 (B) 0 (C) 1 (D) 20

(Application based)

7. Find the value of the following: $13 \times 19 \times 11 \times 7$
(A) 19019 (B) 29029 (C) 39039 (D) 49049
8. Find the value of the following expression: $- (-154) + 62 + 100 - 8 - 24 + 5 - 35$
(A) 354 (B) 254 (C) 345 (D) 245
9. Find the value of the following: $13 \times 19 \times 11 \times 7$
(A) 19019 (B) 29029 (C) 39039 (D) 49049
10. $- 35 \times 107$ is not equal to
(A) $- 35 \times (100 + 7)$ (B) $(- 35) \times 100 + (- 35) \times 7$
(C) $(- 30 - 5) \times 107$ (D) $-35 \times 7 + 100$

11. The integers 10, 0, 5, -5, -7 are arranged in ascending or descending order. Which of these integers will always remain in the middle of the arrangement?
(A) 0 (B) 5 (C) -5 (D) -7

(HOTS)

12. A cement company earns a profit of Rs. 8 per bag of white cement sold and a loss of Rs. 5 per bag of grey cement sold. The company sells 3,000 bags of white cement and 5,000 bags of grey cement in a month. What is its profit or loss?
(A) Rs. 1000 Profit (B) Rs. 1000 loss (C) Rs. 3000 Profit (D) Rs. 3,000 loss
13. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach - 350 m?
(A) 30 minutes (B) 60 minutes (C) 90 minutes (D) 120 minutes
14. A plane is flying at the height of 5000 m above the sea level. At a particular point, it is exactly above a submarine floating 1200 m below the sea level. What is the vertical distance between them?
(A) 6200 (B) 3800 (C) 5200 (D) 4800
15. An airplane covers 1020 km in 5 hours. How much distance will it cover in 16 hours?
(A) 4264 km (B) 3264 km (C) 3250 km (D) 4250 km

(Value based)

16. Marcus bought 86 chocolates. He tried to divide the chocolates equally among his 5 friends but 1 chocolate was left over. What was the share of each friend?
(A) 14 (B) 15 (C) 16 (D) 17

(Logical Reasoning)

- 17 'Match' is related to 'Victory' in the same way as 'Examination' is related to:
(A) Write (B) Appear (C) Success (D) Attempt
18. A family consists of six members P, Q, R, X, Y and Z. Q is the son of R but R is not mother of Q. P and R are a married couple. Y is the brother of R. X is the daughter of P. Z is the brother of P. Who is the father of Q?
(A) Z (B) R (C) P (D) X
19. Complete the series: B, D, F, I, L, P, ?
(A) T (B) S (C) R (D) U
- 20 If in a certain language, GRASP is coded as BMVNK, which word would be coded as CRANE?
(A) FUDQH (B) HWFSJ (C) GVERI (D) XMVIZ