



RAMAGYA SCHOOL, NOIDA
CLASS VI/MATHEMATICS/2017-18
OLYMPIAD PRACTICE WORKSHEET

Concept Based

- In a class room there are $3x$ rows of benches. If each row has $4xy$ benches and each bench can accommodate x students, determine the number of students in the room if it is full upto its capacity.
(A) $6x 3y$ (B) $12x 2y$ (C) $12x 3y$ (D) $16x 4y$
- Which of the following numbers is equal to 1 billion ?
(A) 10 lakh (B) 1 crore (C) 10 crore (D) 100 crores
- Which of the following is the smallest counting number ?
(A) 0 (B) 1 (C) 10 (D) None of these
- Rohit rolled 3 fair number cubes, and the numbers shown below came out on top. How many 3digit numbers can be made using these digits if no digit is repeated ?

4	5	6
---	---	---

- (A) 6 (B) 9 (C) 12 (D) 15

Application Based

- Kartik is k years old. Rehaan's age, r , is 6 less than 2 times Kartik's age. Which of the following equations best represents Rehaan's age?
(A) $r = (6 - 2)k$ (B) $k = 2r - 6$ (C) $r = 2k - 6$ (D) $k = (6 - 2)r$
- Find the value of $-26 - 20 + 33 - (-33) + 24 + 21 - (-25) - 26 - 14$.
(A) 60 (B) 56 (C) 50 (D) 24
- Abhay found the area of a square to be 36 square metres. Which of the following could be used to find the length (l) of one edge of the square?
(A) $l^2 = 6 \times 12$ (B) $l^2 = 12 \times 6$ (C) $l^2 = 6 \times 6$ (D) $l^2 = 6 \times 2$
- The roman numeral for 1679 is _____
(A) CCCXXMIX (B) MDCLXXIX (C) MDCCXIX (D) MMMDCCVI
- Sneha is counting by 3's. If she starts counting at -30 , what is the sum of two missing numbers? $-30, -27, -24, -21, \underline{\quad}?, \underline{\quad}?, \underline{\quad}?, -12$
(A) -33 (B) -3 (C) 43 (D) 33

10. Niharika earns Rs 14579 each month by selling books. Which of the following is the best estimate in nearest thousands, she earns in 2 months ?
(A) Rs 30,000 (B) Rs 20,000 (C) Rs 35,000 (D) Rs 30,800

Value Based

11. Ms. Neha needs to replace the batteries in 20 calculators. Each calculator uses 5 batteries. The batteries are sold in package of 25. How many package of batteries does Ms.Neha need to buy?
(A) 64 (B) 4 (C) 80 (D) 5
12. Coach Kabir needs to buy 20 Tshirts for the girl's basketball team. The list below shows the prices of Tshirts at 2 stores. (i) Store X : One Tshirt costs Rs 150
(ii) Store Y : A package of six Tshirts costs Rs 950. What is the amount of money coach Kabir will spend in all if he buys 12 Tshirts from store Y and 8 Tshirts from store X ?
(A) Rs 4050 (B) Rs1450 (C) Rs 2600 (D) Rs 3100
13. 15 men can finish a piece of work in 40 days. The number of days in which the same work can be done by 20 men is _____.
(A) 20 (B) 30 (C) 48 (D) 15

HOTS Based

14. The sum of two integers is -56. If one of them is -19. Find the other.
a. -37 b. 37 c. 40 d. -40
15. Add -78 to the difference of -56 and -89.
a. -40 b. -45 c. 40 d. 45
16. Aryan travelled 5 km 52 m by bus, 8 km 165 m by car and the rest 480 metres he walked. How much distance did he travel in all ?
(A) 16.397 km (B) 16.697 km (C) 13.976 km (D) 13.697 km
17. There were 180 members in the club last year. The membership decreased by 20% this year. How many members decreased this year ?
(A) 12 (B) 25 (C) 36 (D) 20
18. 9020814 is divisible by.....
(A) 11 (B) 3 (C) 4 (D) 9
19. Which of the following is the smallest counting number ?
(A) 0 (B) 1 (C) 10 (D) None of these
20. A bus travels 126 km in 3 hours and train travels 315 km in 5 hours, then the ratio of their respective speeds is _____.
(A) 2 : 5 (B) 2 : 3 (C) 5 : 2 (D) 25 : 6