



VIDYA BHARATI SCHOOL

OLYMPIAD WORKSHEET: January- 2017

GRADE: VIII

SUBJECT: MATHEMATICS

1. The eighth term of a triangular number is

- (a) 8 (b) 36 (c) 28 (d) 45

2. Which of the following is a monomial?

- (a) $3/x$ (b) $4x^{-3}$ (c) $5x^2y^2z^2$ (d) $4x+5$

3. Which of the following is not a rational number?

- (a) $13/4$ (b) $-17/8$ (c) $0/16$ (d) $18/0$

4. The square root of $625/144$ is equal to

- (a) $25/18$ (b) $25/12$ (c) $13/14$ (d) $4/11$

5. In triangle ABC, $\angle A = 70^\circ$, $\angle B = 90^\circ$, the value of $\angle C$ is

- (a) 60° (b) 50° (c) 20° (d) 80°

6. $a/b + c/d = c/d + a/b$ is-----

- (a) Closure Property (b) Commutative Property (c) Associative Property
(d) Additive Identity

7. Which is called additive identity?

- (a) -1 (b) 1 (c) 0 (d) 2

8. The number of whole numbers between 15^2 and 16^2 is equal to

- (a) 26 (b) 30 (c) 28 (d) none of these

9. $a^{(x-y)} \times a^{(y-z)} \times a^{(z-x)}$ is equal to

- (a) $3a$ (b) $a^{2(x+y+z)}$ (c) $a^{(x+y+z)}$ (d) 1

10. Three angles of a quadrilateral are 85° , 90° and 65° . The fourth angle is

- (a) 90° (b) 95° (c) 105° (d) 120°

11. A diagonal of a rectangle is inclined to one side of the rectangle at 25° . The acute angle between the diagonals is

- (a) 55° (b) 50° (c) 40° (d) 25°

12. The cube of a 2-digit number will contain

- (a) 1 or 2 digit (b) 2 or 3 digits (c) 3 or 4 digits (d) 1, 2 or 3 digits

13. The cube root of the number 531441 is

- (a) always (+)ve (b) always (-)ve (c) (+)ve and (-)ve roots (d) all of these

14. The units digit of the cube of a number is 5. The units digit of its cube root is

- (a) 9 (b) 5 (c) 3 (d) 1

15. If $14 \times 14 = 196$, then $\sqrt{196} = \text{----}$

- (a) 12 (b) 13 (c) 15 (d) none of these

16. The cube of a number with 0 in the units place will always have ----- on the right.

- (a) 1 zero (b) 2 zeros (c) 3 zeros (d) 4 zeros

17. The area of a rectangle is 500 sq. m. If the sides are doubled, what will its area become?

- (a) 1600 sq. m (b) 2000 sq. m (c) 1200 sq. m (d) 160 sq. m

18. What will be the amount on a sum of Rs.2000 at the rate of 10% p.a. compound interest

For $3\frac{1}{2}$ years payable semi-annually. How many conversion periods are there in this case

- (a) $3\frac{1}{2}$ (b) 3 (c) 4 (d) 6.8

19. What is the probability of getting a vowel from the letters of the word PROBABILITY?

(a) $\frac{4}{11}$ (b) $\frac{3}{10}$ (c) $\frac{1}{11}$ (d) 1

20. The difference between the simple interest and compound interest on a sum of Rs.1000 at the rate of 10% for 2 years is

(a) Rs.1 (b) Rs.10 (c) Rs.100 (d) none of these

*For more practice material please click:www.brilliant.org; www.sofolympiadtrainer.co

www.olympiadhelper.com