

## VIII CLASS

- $\frac{8}{15} \div \frac{2}{3} =$  \_\_\_\_\_
- Rational form of 0.45 is \_\_\_\_\_
- $3^0 + 4^0 + 5^0 =$  \_\_\_\_\_
- $(-20) \times (1.85) =$  \_\_\_\_\_
- The sum of  $\frac{-2}{5} + \frac{3}{2}$  is \_\_\_\_\_
- $\frac{-5}{12} +$  \_\_\_\_\_  $= -1$
- Decimal form of  $\frac{12.5}{4}$  is \_\_\_\_\_
- Number of rational numbers between  $\frac{1}{2}$  and  $\frac{1}{4}$  are \_\_\_\_\_
- Value of  $2^{-3} \times 5^{-3} =$  \_\_\_\_\_
- Compare  $\frac{13}{-8}$  and  $\frac{-27}{12}$ , which is lesser? \_\_\_\_\_
- The product of  $\frac{3}{8}$  and  $\frac{-5}{7}$  is \_\_\_\_\_
- $2.56 \div 1.6 =$  \_\_\_\_\_
- Period of  $0.\overline{123}$  is \_\_\_\_\_
- Express  $\frac{240}{-840}$  in standard form \_\_\_\_\_
- \_\_\_\_\_ should be subtracted from  $\frac{5}{9}$  to get  $\frac{2}{3}$
- The product of  $\frac{25}{14}$  and multiplicative inverse of  $\frac{5}{7}$  is \_\_\_\_\_
- If  $a = 2$ ,  $b = 3$ , and  $c = 1$  find the value of  $a^2 + 2(b^2 + c^2) =$  \_\_\_\_\_
- The area of a square is 256 sq. cms. Its perimeter is \_\_\_\_\_ (units)  
A) 16                      B) 32                      C) 48                      D) 64
- Degree of  $4x^3 + 3x^2 - 7x + 1$  is \_\_\_\_\_
- Degree of your phone number is \_\_\_\_\_
- The zero of the polynomial  $ax + b$  is \_\_\_\_\_
- If  $\frac{x}{2} - 1 = 3$  then  $x =$  \_\_\_\_\_
- $\left(\frac{5}{3}\right)^{-5} \times \left(\frac{5}{3}\right)^{-11} = \left(\frac{5}{3}\right)^{8x}$  then  $x =$  \_\_\_\_\_

24. Sum of three consecutive integers is 24 then the integers are \_\_\_\_\_
25. Between what two consecutive integers will  $-1.32$  lies ? \_\_\_\_\_
26.  $4x^3 - 3x^3 + 14x^3 =$  \_\_\_\_\_  
 A)  $-15x^3$                       B)  $14x^3$                       C)  $17x^3$                       D)  $15x^3$
27. If  $\frac{x}{2} + \frac{x}{3} = 5$ , then  $x =$  \_\_\_\_\_
28. Factorize  $(a + b)^2 - c^2 =$  \_\_\_\_\_
29. If  $0.5x - 2.5 = 77.5 - 0.3x$  then  $x =$  \_\_\_\_\_
30.  $(\sqrt{x} + \sqrt{y})(\sqrt{x} - \sqrt{y}) =$  \_\_\_\_\_
31. Symbolic form of “4 less than half of x” is \_\_\_\_\_
32. The number of the form  $a + ib$  where,  $a, b \in \mathbb{R}$  and  $i = \sqrt{-1}$  is called the \_\_\_\_\_ number.
33. Square root of zero is \_\_\_\_\_
34. Every positive number has \_\_\_\_\_ square roots.
35.  $\sqrt{a^2} =$  \_\_\_\_\_
36.  $\sqrt{\frac{a}{b}} =$  \_\_\_\_\_
37.  $\sqrt{a-b}$  \_\_\_\_\_  $\sqrt{a} - \sqrt{b}$
38.  $\sqrt{a+b}$  \_\_\_\_\_  $\sqrt{a} + \sqrt{b}$
39.  $\sqrt{100a^6b^6} =$  \_\_\_\_\_
40. If  $\sqrt{1156} = 34$ ; then  $\sqrt{0.001156} =$  \_\_\_\_\_
41.  $\sqrt{1024x^{16}y^8z^{20}} =$  \_\_\_\_\_
42.  $\sqrt{\frac{p}{q}} \times \sqrt{\frac{q}{r}} \times \sqrt{\frac{r}{p}} =$  \_\_\_\_\_
43. Present age of Ravi is  $x$ , 5 years ago his age is \_\_\_\_\_
44.  $143.\overline{143} \times 1000 =$  \_\_\_\_\_

45. Periodicity of 2.63 is \_\_\_\_\_
46.  $(6^0 - 4^0) \times (6^0 + 4^0) \times 5^0 =$  \_\_\_\_\_
47. In  $2x^2y^3$ , the literal Coefficient is \_\_\_\_\_
48.  $-9x^2 + 7x^2 - 16x^2 =$  \_\_\_\_\_
49.  $3186500000 = 3.1865 \times 10^k$ , then  $k =$  \_\_\_\_\_
50. Usual form of  $1.002 \times 10^5 =$  \_\_\_\_\_
51. The value of  $4x^2 \times 3y^2 \times 0 \times 3z^2$  is \_\_\_\_\_
52. If  $5^x = 1000$  then  $5^{x+2} =$  \_\_\_\_\_
53. If  $8a = 85^2 - 77^2$ , then  $a =$  \_\_\_\_\_
54.  $(2x + 5)^2 + (2x - 5)^2 =$  \_\_\_\_\_
55. Every number is equal a itself specifies \_\_\_\_\_ property
56. Factorize  $a^2 - (b - c)^2 =$  \_\_\_\_\_
57. If  $a = b$ ,  $b = c$  then  $a = c$  for any three numbers  $a, b, c$  specifies \_\_\_\_\_ property
58.  $(x + y)(x^2 - xy + y^2) =$  \_\_\_\_\_
59. Factorize  $a^2b^2 + c^2d^2 - a^2c^2 - b^2d^2$  are \_\_\_\_\_
60. Factors of  $3ab$  are \_\_\_\_\_
61. Factors of  $x^{2n} - 1$  are \_\_\_\_\_
62. Reciprocal of  $3^3$  is \_\_\_\_\_
63.  $a^2 - 2ab + b^2 =$  \_\_\_\_\_
64.  $(x + \underline{\quad})^2 = x^2 + 2xy + \underline{\quad}$
65.  $(2x - \underline{\quad})^2 = \underline{\quad} - \underline{\quad} + 16y^2$
66.  $(\underline{\quad} + 2l)^2 = 25m^2 + \underline{\quad} + \underline{\quad}$
67.  $(\underline{\quad} - 5z)^2 = \underline{\quad} - 70yz + \underline{\quad}$
68.  $\left(\frac{1}{3} + \frac{\sqrt{7}}{3}\right) \left(\frac{1}{3} - \frac{\sqrt{7}}{3}\right) =$  \_\_\_\_\_
69.  $(2\sqrt{x} - 4)(2\sqrt{x} + 4)$

70. Supply the missing term in the product,  $(8y + 3) (7y \underline{\hspace{1cm}}) = 56y^2 - 19y - 15$
71. Find the product of  $(12m^2n - mn^2 - 1) (6m^2n^2) = \underline{\hspace{2cm}}$
72.  $(\sqrt{a^4})^2 = \underline{\hspace{2cm}}$
73. Find the square root of  $\frac{144l^2m^2}{169n^2} = \underline{\hspace{2cm}}$
74.  $a^3 - b^3 = (a^2 + ab + b^2) (\underline{\hspace{2cm}})$
75. If  $t + \frac{1}{t} = 2$  then  $t - \frac{1}{t} = \underline{\hspace{2cm}}$
76.  $\frac{(a+b)^2 + (a-b)^2}{(a^2 + b^2)} = \underline{\hspace{2cm}}$
77. 23 % of a number is 46, then the number is  $\underline{\hspace{2cm}}$  -
78. 25 % =  $\underline{\hspace{2cm}}$  ( in fraction form)
79. 38 % =  $\underline{\hspace{2cm}}$  ( in decimal form )
80. If 3% of x is 9 then x =  $\underline{\hspace{2cm}}$
81. 240 students in a school went to picnic. Its percentage is 80%. Then total strength of the school is  $\underline{\hspace{2cm}}$
82. 16 months =  $\underline{\hspace{2cm}}$  years
83. If CP = Rs 800, SP = Rs 880, Then profit/ loss =  $\underline{\hspace{2cm}}$
84. If cost price is Rs P and profit is Rs x, then the selling price is  $\underline{\hspace{2cm}}$
85. If amount = Rs 660 and principal = Rs 500, then I =  $\underline{\hspace{2cm}}$
86. SI on Rs. 1000 @12% per annum for 6 months is  $\underline{\hspace{2cm}}$
87. Dividend =  $\underline{\hspace{2cm}}$  x  $\underline{\hspace{2cm}}$  + Remainder.
88.  $x > 0$  means x is a  $\underline{\hspace{2cm}}$  number.

89.  $\frac{-32}{243} = \underline{\hspace{2cm}}$  (write in power notation)
90. The length and breadth of a rectangle are in the ratio 4 : 1 & its area is 400 sq. units. Then its length is  $\underline{\hspace{2cm}}$  (units)
- A) 100                      B) 20                      C) 40                      D) 10
91. A ray has  $\underline{\hspace{2cm}}$  end point(s).
92. A line has  $\underline{\hspace{2cm}}$  end points.
93. A closed figure with three line segments is called  $\underline{\hspace{2cm}}$
94. Sum of the angles in a triangle is equal to  $\underline{\hspace{2cm}}$  right angles.
95.  $\underline{\hspace{2cm}}$  measurements are required to construct a triangle.
96. In a triangle opposite side to the right angle is called as  $\underline{\hspace{2cm}}$
97. In  $\triangle ABC$ , if  $BC = CA$  then  $\underline{\hspace{2cm}}$  angles are equal.
98.  $\triangle ABC$  is isosceles with  $AB = AC$ , if  $\angle A = 80^\circ$ , then  $\angle C = \underline{\hspace{2cm}}$
99. In  $\triangle DEF$ , if  $\angle D = \angle E$  then  $\underline{\hspace{2cm}}$ ,  $\underline{\hspace{2cm}}$  sides are equal.
100. The sum of the two sides of a triangle is  $\underline{\hspace{2cm}}$  than the third side.
101. In an isosceles triangle, if the included angle of equal sides is  $80^\circ$ , the other two angles are  $\underline{\hspace{2cm}}$
102. In a quadrilateral ABCD; if  $\angle D = 150^\circ$ ;  $\angle A = \angle B = \angle C$  then  $\angle A = \underline{\hspace{2cm}}$
103.  $\underline{\hspace{2cm}}$  measurements are required to construct a right triangle.
104. In a triangle, if one of the exterior angle is  $130^\circ$ , corresponding interior angle is  $\underline{\hspace{2cm}}$ .
105. If the exterior angle is  $100^\circ$ , and the opposite interior angles are equal, then the three angles of a  $\triangle$  are  $\underline{\hspace{2cm}}$ .

106. In a right triangle, the sum of the angles other than right angle is \_\_\_\_\_
107. Exterior angle of equilateral triangle is \_\_\_\_\_.
108. Concurrent point of medians of a triangle is known as \_\_\_\_\_.
109. Orthocenter, circum centre will coincide in a \_\_\_\_\_ triangle.
110. Side of an equilateral triangle is 10 cm, its perimeter is \_\_\_\_\_.
111. A triangle in which no two sides are equal is \_\_\_\_\_ triangle.
112. A triangle has \_\_\_\_\_ angular bisectors.
113. Objects, which have same shape and side are called \_\_\_\_\_ objects.
114. In  $\triangle DEF$ , Included side between  $\angle E$  and  $\angle F$  is \_\_\_\_\_.
115. Sum of the angles in a quadrilateral is \_\_\_\_\_ right angles.
116. The four angles of a quadrilateral are in the ratio 1 : 2 : 3 : 4 then the measures are \_\_\_\_\_.
117. Sum of the exterior angles of a triangle is \_\_\_\_\_.
118. In \_\_\_\_\_, the diagonals bisect each other at right angles.
119. Two angles of a quadrilateral are  $70^\circ$  each and the third angle is  $100^\circ$ , fourth angle is \_\_\_\_\_.
120. In a quadrilateral if  $\angle A + \angle C = 200^\circ$  then  $\angle B + \angle D =$  \_\_\_\_\_
121. Diagonal divides a square into \_\_\_\_\_ congruent triangles.
122. Angle in the semi circle is \_\_\_\_\_
123. Longest chord in a circle is \_\_\_\_\_
124. Length of diagonal of a rectangle whose measures are 12 m and 5m is \_\_\_\_\_
125. Area of circle is \_\_\_\_\_

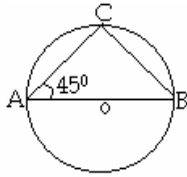
126. The value of  $\pi$  is \_\_\_\_\_ (Rational form)
127. The ratio of the circumference of a circle to its diameter is \_\_\_\_\_
128. In a circle the number of chords that can be drawn Through centre are \_\_\_\_\_
129. Perimeter of semi circle is \_\_\_\_\_
130. Area of circular ring is \_\_\_\_\_
131. Diagonal of rectangle whose length l and breadth b is \_\_\_\_\_
132. \_\_\_\_\_ faces are parallel to each other in cube/cuboid
133. The total surface area of cube whose edge is 5 cm is \_\_\_\_\_
134. Volume of a cube whose edge is 8 cm is \_\_\_\_\_
135.  $1 \text{ m}^3 =$  \_\_\_\_\_  $\text{cm}^3$
136.  $1 \text{ l} =$  \_\_\_\_\_ kl
137. Total surface area of a cube is 150 sq cm. Then its volume is \_\_\_\_\_  $\text{cm}^3$
138. Two cuboids have the same volume their length are in the ratio 5 : 4, Their breadths are in the ratio 2 : 3 , then the ratio of their heights is \_\_\_\_\_
139. A tub of inner dimensions 125 cm , 100 cm , 80cm is full of water, then the quantity of water in liters is \_\_\_\_\_
140. Sheet required to construct a box of dimensions 10 cm , 5 cm, 3 cm is \_\_\_\_\_
141. The production of 45,000 cars are represented with \_\_\_\_\_ cars in pictograph, if 1 picture represents 10,000 cars
142. If 5 words are represented in a bar graph with 1 cm then 9 word in \_\_\_\_\_ cm
143. Bar diagram contains \_\_\_\_\_
144. If a data contains 9 items, the number of bars in the bar diagram is \_\_\_\_\_

145. If the length of two bars is 8 cm, 12 cm. The ratio of the value represented by them is

\_\_\_\_\_

146. In a bar graph, if 1 cm = 15 units then 2.5 cm is \_\_\_\_\_ units

147.



IF  $\angle A = 45^\circ$

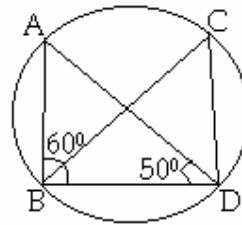
$\angle B =$  \_\_\_\_\_

$\angle C =$  \_\_\_\_\_

148. In the adjacent figure

$\angle A =$  \_\_\_\_\_

$\angle C =$  \_\_\_\_\_



149. If  $\triangle ABC \cong \triangle DEF$ , then  $\angle B =$  \_\_\_\_\_

150. Two circles are congruent when their \_\_\_\_\_ are equal.