Octahedral classes, kharadi

2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics

Maths Test

Maximum Marks: 30 **Time Allowed: 1 hour and 30 minutes**

Section A

1. Find 3 rational numbers between $\frac{-4}{3}$ and $\frac{-8}{7}$. **1**
2. Simplify: $\left(-5 \times \frac{2}{15}\right) - \left(-6 \times \frac{2}{9}\right)$ **1**
3. Solve the following linear equation : $\frac{3t-2}{4} - \frac{2t+3}{3} = \frac{2}{3} - t$ **1**
4. The ages of Hari and Harry are in the ratio 5 : 7. Four years from now the ratio of their ages will be 3 : 4. Find their present ages. **1**
5. Find the least number which must be added to 1750 so as to get a perfect square. Also find the square root of the perfect square so obtained. **1**
6. Find the least number which must be subtracted from 3250 so as to get a perfect square. Also find the square root of the perfect square so obtained. **1**
7. Find the smallest number by which 192 must be divided to obtain a perfect cube. **1**
8. Find the smallest number by which 675 must be multiplied to obtain a perfect cube. **1**
9. Find the value of m for which $5^{m} \div 5^{-3} = 5^{5}$ **1**
10. Simplify: $-2^4 \times \left(\frac{3}{2}\right)^4$ **1**

Section B

11. Simplify. $(3^{-5} \times 10^{-5} \times 125) \div (5^{-7} \times 6^{-5})$ **2**
12. Simplify : $\frac{3^{-5} \times 10^{-5} \times 125}{5^{-7} \times 6^{-5}}$ **2**
13. If the length and breadth of a rectangular field are in the ratio 6:4. find the length and breadth if the cost of fencing the field at the rate of Rs 80 per metre is Rs 16000. **2**
14. Solve for x: **2**

    $x - \frac{x}{9} - \frac{x}{12} - \frac{x}{36} = 56$
15. What should be added to $\left(\frac{1}{2} + \frac{1}{3} + \frac{1}{5}\right)$ to get 3? **2**
16. Find the missing entries in the table: **2**

Fraction in standard form	Numerator	Denominator	Sign of rational number
$\frac{6}{7}$	84		positive
	-5	-6	
-69$\times \frac{-2}{52} \times$-2			negative

17. How many cubes of side 2 cm can be packed in a cubical box with inner side equal to 4 cm. **2**
18. Find the cube root of 4.913 **2**
19. In the ticket booking counters of a cinema hall, there are as many people standing in each queue, as the number of queues. If the total number of persons standing in the queues is 441, find (i) the number of queues (ii) the number of people in each queue. **2**
20. Find the smallest whole number with which 252 should be divided so as to get a perfect square. Also find the square root of the square number so obtained. **2**