

Ts8M

Tenkasi District  
First Mid Term Test - 2023



09-08-2023

**Standard 8**  
**MATHEMATICS**  
**PART - A**

Time: 1.30 Hours

Marks: 50

**I. Choose the best answers.****6×1=6**

- 1)  $\frac{3}{4} \times \left( \frac{5}{8} + \frac{1}{2} \right) =$
- a)  $\frac{5}{8}$                       b)  $\frac{2}{3}$                       c)  $\frac{15}{32}$                       d)  $\frac{15}{16}$
- 2) Closure property is not true for division of rational numbers because of the number .....
- a) 1                      b) -1                      c) 0                      d)  $\frac{1}{2}$
- 3) The square of 43 ends with the digit .....
- a) 9                      b) 6                      c) 4                      d) 3
- 4) The radius of a circle of diameter 24 cm is .....
- a) 6 cm                      b) 12 cm                      c) 15 cm                      d) 18 cm
- 5) If the radius of a sector is 21 cm and its central angle is  $120^\circ$ , then the length of the arc is .....
- a) 44 cm                      b) 22 cm                      c) 33                      d) 11 cm
- 6) If a set of a 3 - D shape has six plane squares, then it is called .....
- a) Triangular prism                      b) Cuboid  
c) Cube                      d) Square pyramid

**II. Fill in the blanks.****4×1=4**

- 7) The value of  $\frac{-5}{12} + \frac{7}{15}$  is .....
- 8)  $4^{-3} \times 5^{-3} =$  .....
- 9) A part of a circumferences of a circle is called as .....
- 10) A closed plane figure formed by three (or) more sides is called a .....

**III. Match the following.****5×1=5**

- 11)  $a^m \times a^n$                       -                       $2\pi r$
- 12)  $(a^m)^n$                       -                       $(\pi + 2)r$
- 13)  $a^0$                       -                       $a^{m+n}$
- 14) Circumference of a circle                      -                      1
- 15) Circumference of a semi circle                      -                       $a^{mn}$

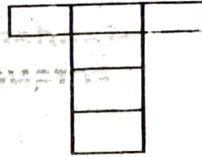
**PART - B****IV. Answer any 5 questions.****5×2=10**

- 16) Compare  $\frac{1}{3}$  and  $\frac{4}{3}$
- 17) Evaluate  $\frac{-7}{27} \times \frac{24}{-35}$
- 18) Find the value of  $(-2)^5 \times (-2)^{-3}$
- 19) Give the answer in scientific notation. A human heart beats at an average of 80 beats per minute. How many times does it beat in
- i) an hour                      ii) a day?
- 20) A spinner of radius 7.5 cm is divided into 6 equal sectors. Find the area of each of the sectors.

Kindly send me your study materials to [padasalai.net@gmail.com](mailto:padasalai.net@gmail.com)

**Ts8M**

- 21) Write the number of Faces (f), Vertices (v), Edges (E) for cube.  
 22) Which 3 - D shape do the following set represent? Draw it.



**PART - C**

**V. Answer any four questions.**

**4x5=20**

23) Simplify  $\left[ \frac{11}{8} \times \left( \frac{-6}{33} \right) \right] + \left[ \frac{1}{3} + \left( \frac{3}{5} + \frac{9}{20} \right) \right] - \left[ \frac{4}{7} \times \frac{-7}{5} \right]$

24) Verify the distributive property

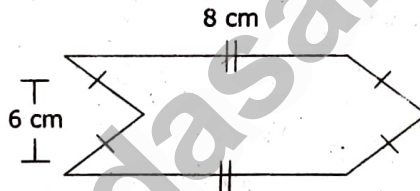
$a \times (b + c) = (a \times b) + (a \times c)$  for the rational numbers  $a = \frac{-1}{2}$ ,  $b = \frac{2}{3}$  and

$c = \frac{-5}{6}$

25) Find the square root of the following by prime factorisation..

- i) 324                                  ii) 9025

26) Find the area of the combined figure given which is got by the joining of two parallelograms.

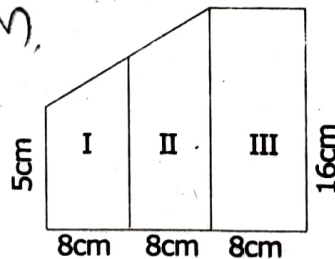


27) Using Euler's formula, find the unknowns.

S.No	Faces	Vertices	Edges
1	-	6	14
2	8	-	10
3	20	10	-

28) A 3 - fold invitation card in given with measures as in the figure. Find its area.

Sivakumar. M,  
 Sri Ram Matics  
 HSSivallam  
 Tenkasi Dist.



**PART - D**

**VI. Answer the following question. (any one)**

**1x5=5**

29) a) Construct a quadrilateral NICE with NI = 4.5 cm, IC = 4.3 cm, NE = 3.5 cm, NC = 5.5 cm and IE = 5 cm. Also find its area.

(OR)

b)  $\overline{AR} \parallel \overline{YM}$ ,  $AR = 7\text{cm}$ ,  $RM = 6.5\text{ cm}$ ,  $\angle RAY = 100^\circ$ ,  $\angle RAM = 60^\circ$ . Construct a trapezium ARMY and find its area.