

SUMMATIVE ASSESSMENT – FIRST TERM**Std - VIII****MATHEMATICS****Max. Marks: 100****Time: 2.30 Hrs****I. Fill in the blanks:****5 x 1 = 5**

1. The value of $\frac{-11}{18} \div \frac{44}{9}$ is _____
2. The reciprocal of $-\frac{2}{9}$ is _____
3. The longest chord of a circle is _____.
4. From 0 subtract $\frac{5}{2}$ _____
5. $\frac{-3}{5} + \frac{-2}{7} =$ _____

II. Choose the correct answer:**10 x 1 = 10**

1. The radius of a circle is 2 cm. Diameter is _____
a) 4 b) 8 c) 1 d) 10
2. The quotient $20x^3 \div 8x$ simplified into decimal form is _____
a) 3.5 b) 2.5 c) 4.5 d) none
3. The HCF of $2xy$ and $6x^2y$ is _____
a) $3xy$ b) $2xy$ c) xy d) $6xy$
4. Divide $32ab^2 + 16a^2b$ by $4ab$. _____
a) $8b + 4a$ b) $4b + 8a$ c) $4ab$ d) $2a + 6b$
5. If the length and breath of a rectangle is $5x^2y$ and $6y$ then its area is _____ sq.cm
a) $30x^2y$ b) $30x^3y$ c) $6x^2y$ d) $5x^3y$
6. The co-efficient of x^2 in $3x^2yz$ is _____
a) $3z$ b) $3yz$ c) $3y$ d) $3x^2yz$

7. Subtract the sum of $-5x$ and $-3x$ from sum of $-9x$ and $-4x$. _____
 a) $-5x$ b) $7x$ c) $3x$ d) $9x$

8. If the measure of two angles of a triangle are 37° and 64° then the third angle is _____.
 a) 75° b) 79° c) 60° d) 65°

9.  The value of x is _____
 a) 75° b) 80° c) 86° d) none

10. The exterior angle is equal to the sum of two opposite _____ angles.
 a) interior b) exterior c) right d) acute

III. Match the following:

5 x 1 = 5

1. Euler's formula - does not exist

2. 0.3 - $V - E + f = 2$

3. $\frac{1}{0}$ - πr^2

4. Area of a circle - 1

5. 3^0 - $\frac{3}{10}$

IV. Do as directed:

15 x 2 = 30

1. Find 'x' if $5\frac{x}{5} \times 3\frac{3}{4} = 21$.

2. Find the product : $\frac{-7}{11} \times 2\frac{5}{7} \times \frac{-34}{38}$

3. Subtract $\frac{3}{7}$ from $\frac{14}{3}$

4. Add: $(8xy + x^3y - 1)$ and $(x^3y + 3 - 3xy)$

5. The diameter of a coin is 3 cm. Find its circumference.

6. Find the area of a circle whose radius is 6.2 cm.

7. Find the length of the sector whose radius and angle are 4.2 cm and 30° .

8. The perimeter and angle of a sector are given by 228 cm and 72° respectively. Find the arc length and area of the sector.

9. Factorise using identities: $x^2 - 8x + 16$.

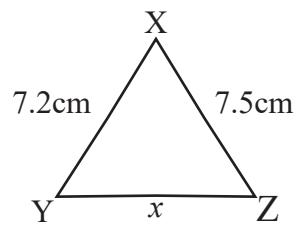
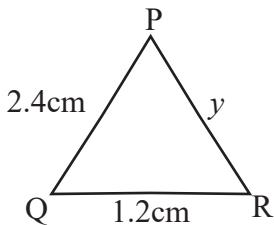
10. Simplify: $(y^2 - 7y - 18) \div (y - a)$.

11. An equilateral triangle has side $(3x + 2)$ cm. If the perimeter is 60 cm, find the length of each side.

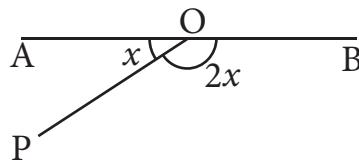
12. The product of 2 consecutive integers is 272. Find the value of each integer.

13. The measures of two angles of a triangle are 37° and 64° . Find the measurement of the third angle.

14. Triangle PQR and XYZ are similar. Find the length of x and y .

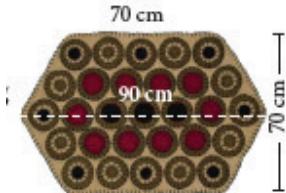


15. Find the value of x .

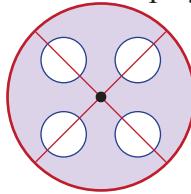


IV. Answer any 10 questions:**10 x 5 = 50**

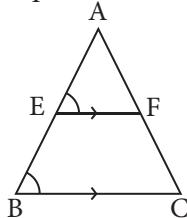
- How many pieces of $3\frac{3}{5}$ m of rope can be cut from a 10 m long rope?
- Convert the recurring decimal into a fraction: $0.24\overline{367}$
- A door mat of hexagonal shape has the following measures as given in the figure. Find its area.



- Inside a circular park there are 4 identical circular play areas as shown in the figure. Calculate the grass area (shaded part in the figure) of the park if the radius of the park is 8 m and the radius of each play area is 3 m.



- Find the product of $2x^2 + x - 4$ by $3x^2 - 7x + 3$.
- What must be added to $3a^2x^2 + 9ax - 3a$ to get the sum '0'?
- Simplify $(5a^3 + a - 3) \div (a - 1)$.
- In the triangle given below, EF is parallel to base BC of ΔABC . Prove that $\Delta ABC \sim \Delta AEF$.



- What is the value of y , if $16a^2 + 24ab + y$ is a perfect square?
- What is the value of x if the angles $x + 15$, $x - 15$ and $x + 60$ are the angles of a triangle.
- Construct a quadrilateral given $LM = 4.5$ cm, $MN = 3.4$ cm, $NP = 2.7$ cm, $\angle N = 50^\circ$ and $\angle M = 120^\circ$
- Using a tree diagram, list the 3-digit numbers that are possible with 3, 5, 2.