

PUSHPAGIRI HIGH SCHOOL, HOSAGAVI.

SUMMATIVE ASSESSMENT- 1 [SA-1]

CLASS : 9TH std

SUB : Mathematics

MARKS: 80M

Time : 3hr 15min.

I. Choose the correct answer

8x1=8

1. $\sqrt{5}$ is an

- A) A rational number B) An integer C) An irrational number D) Whole number

2. The degree of the polynomial $7x^3 - 4x^2 + x - 9$ is

- A) 3 B) 2 C) 1 D) 0

3. The coordinates of a point on the x-axis are

- A) (0, y) B) (x, 0) C) (x, y) D) (0, 0)

4. Find the value of polynomial $5x - 4x^2 + 3 = 0$ at $x=0$

- A) 0 B) 6 C) 3 D) 2

5. If one angle of a Supplementary pair is 120° then the other angle is :

- A) 60° B) 120° C) 90° D) 180°

6. If $2x + 3y = 6$ is a linear equation then value of a and b in standard form is:

- A) 2, 6 B) 2, 3 C) 3, 2 D) 6, 2

7. The Linear equations in two variables $x + y = 2$ has _____.

- A) Unique solution B) Infinitely solutions C) No solution D) None

8. If two angles are complementary their sum is:

- A) 360° B) 180° C) 90° D) 60°

II. Answer the following questions

8x1=8

9. Find the decimal expansions of $10/3$.

10. Write the standard form of a quadratic polynomial.

11. Write the coordinates point P and R in the figure.

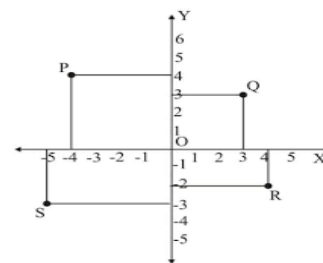
12. What is the value of y when $x = 3$ of the line $y = 3x - 9$?

13. Define a line segment.

14. Define irrational number.

15. Find the product of $(x + 3)(x + 5)$ using suitable identity.

16. Every integer is a rational number (write this statement TRUE OR FALSE)



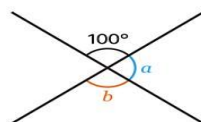
III. Answer the following questions

8x2=16

17. Express $0.\overline{3}$ as a in the form of p/q where p and q are integers and $p \neq 0$

18. Factorise the polynomial $x^2 - 16$ using suitable identity.

19. Find value of a° and b° in the given figure



20. Write the equation $(2x+1)^3$ in expanded form using suitable identity.

21. Find rational numbers between $3/5$ and $4/5$.

22. What are the difference between intersect line and non intersect line explain with diagram.

23. Simplify $(3+\sqrt{3})(2+\sqrt{2})$.

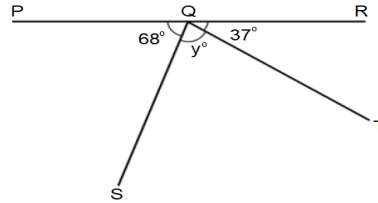
24. Write the equation $(2a-3b)^2$ in expanded form using suitable identity.

IV. Answer the following questions

$$9 \times 3 = 27$$

25. plot the following points on the graph: A(3,2), B(-2,5), C(-5,-5), D(4,-3).

26. In the figure given below, if $\angle PQR$ is a straight angle, find the value of y .



27. Write the following in decimal form and say what kind of decimal expansion?

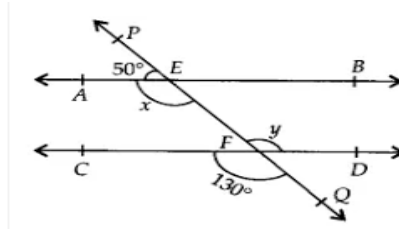
$$36/100$$

28. Locate $\sqrt{2}$ on the number line.

29. Evaluate the following product without multiplying directly:

$$103 \times 107$$

30. When transversal intersect two parallel lines, what types of angles are formed? And find out x° and y°



31. Write any three solutions of the given equation $x+3y=8$.

32. Verify $(x^3+y^3) = (x+y)(x^2-xy+y^2)$.

33. Rationalize the denominator of $\frac{1}{\sqrt{5}+\sqrt{2}}$

V. Answer the following questions

$$4 \times 4 = 16$$

34. Classify the types of polynomials based on degree and number of terms with suitable examples.

35. Factorise: a) $p(x)=3x^2+7x+4$

b) $p(x)=4x^2+4x+1$

36. Write any three Axioms and three postulates of Euclids.

37. Solve the equation by Graphical method $y=2x+1$.

VI. Answer the following question

$$1 \times 5 = 5$$

38. In below figure $AB \parallel CD$, $\angle APQ = 50^\circ$ And $\angle PRD = 127^\circ$, find x and y .

