Class-IX   (Syllabus and Sample Question Paper)

Real Numbers, Polynomials, Linear, Equation in Two Variables, Line, Angles and Triangles, Quadrilaterals, Mensuration, Statistics, Probability, Mathematical Reasoning and Logical Ability, Coordinate Geometry Circles, Everyday Mathematics

The Actual Question Paper Contains 40 Questions. The Duration of the Test Paper is 60 Minutes

1.   **The area of a trapezium is 780 cm² and the perpendicular distance between the two parallel sides is 24 cm. If one of the two parallel sides be 38 cm, then the other side is?**
     (A) 29 cm   (B) 27 cm   (C) 92 cm   (D) 42 cm
     (E) None of these

2.   **The area of a right triangle, whose length of the diameter of its circumcircle is 10 cm and the altitude to the hypotenuse is 4.5 cm, is?**
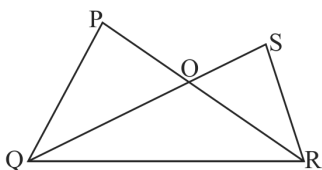   (A) 22.5 cm   (B) 22.5 cm²   (C) 23.5 cm²   (D) 24.5 cm²
     (E) None of these

3.   **The point P(x, y), Q (-3, -1) and R (3, 4) such that PQ = PR, then ?**
     (A) $x = y$ (B) $10x + 12y = 15$ (C) $5x + 6y = 7$ (D) $10x - 12y = 9$
     (E) None of these

4.   **A (4, 3), B (6, 4), C (5, 6) and D (3, 5) are the angular points of a ?**
     (A) Rectangle   (B) Square   (C) Rhombus   (D) Trapezium
     (E) None of these

5.   **If the point is in the third quadrant, then the point will be in the form of _____?**
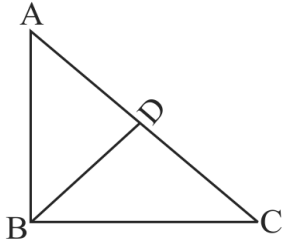   (A) (+, −)   (B) (+, +)   (C) (−, −)   (D) (−, +)
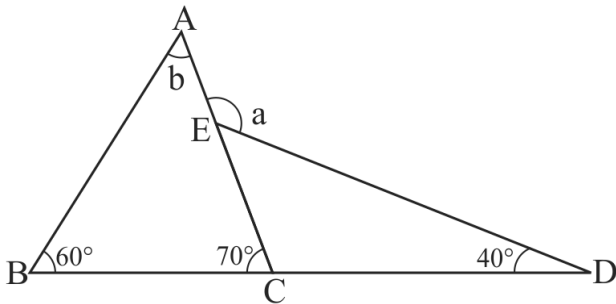   (E) None of these

6.

     In the above figure, If PQ= SR, SQ = PR and OP: OR = 1:2 then OS: OQ will be?
     (A) 1:2   (B) 2:1   (C) 1:3   (D) 2:1
     (E) None of these

7. In the given figure, $\triangle$ABC is a right triangle. If BD$\perp$AC and AD = DC, then ABD and BCD are congruent by?

(A) A - A - A (B) S – A – A (C) S A S (D) A – S – A

(E) None of these

8.

In the above figure the measure if a and b will be?

(A) 150°, 50° (B) 100°, 80° (C) 120°, 40° (D) 110°

(E) None of these

9. Write the digit in place of (*).
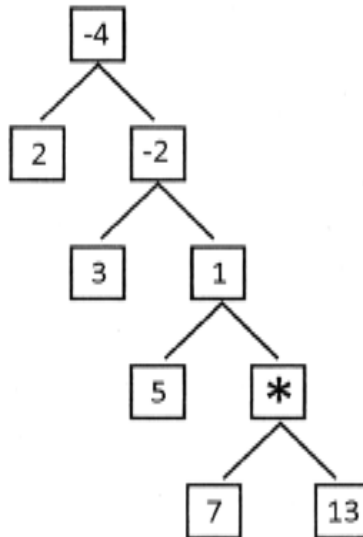
(A) 6 (B) 20 (C) 91 (D) 1

(E) None of these

10. Which one of the following graph represents the line 4x +5y = 20?

(A)

(B)

(C)

(D)

(E) None of these

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11. The length of tangent from a point P (which is outside the circle) to the circle is 10 cm. If the distance P from to the point of intersection of tangents to the centre of the circle is 8 cm, then the radius of the circle is ____.

(A) 4 cm   (B) 14 cm   (C) 6 cm   (D) 7 cm

(E) None of these

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12. In the given $\triangle$ DEF, GH II EF and if $\dfrac{DG}{GE} = \dfrac{8}{11}$ and DF = 8.5 cm then the value of HF is equal to.................?

(A) 5.5 cm   (B) 5.2 cm   (C) 9 cm   (D) 7 cm

(E) None of these

13. If $\cos\alpha = \frac{1}{2}$ then the value of $(3\sin\alpha - 4\sin^3\alpha)$ is ?

(A) $\frac{\sqrt{3}}{8}$ (B) $\frac{\sqrt{3}}{2}$ (C) 0 (D) $4\frac{\sqrt{3}}{7}$

(E) None of these

14. **Find the mean of the following frequency distribution:**

Mid Values	Frequency
5	4
10	2
15	3
20	6
25	10

(A) 10.2 (B) 18.2 (C) 10 (D) 14

(E) None of these

15. **The percentage of marks obtained by student in five unit test are given below. A unit test is selected at random. What is the probability the student gets more then 60% marks in the test?**

Unit Test	% of Marks
i	35
ii	75
iii	65
iv	55
v	75

(A) $\frac{1}{5}$ (B) $\frac{1}{2}$ (C) $\frac{3}{5}$ (D) $\frac{3}{4}$

(E) None of these

ANSWERS

1. B	2. B	3. B	4. B	5. C
6. A	7. C	8. A	9. C	10. A
11. C	12. A	13. C	14. B	15. C