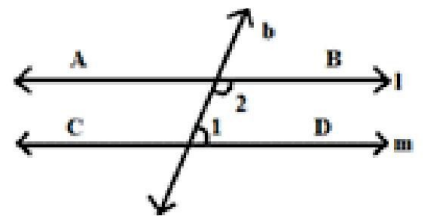
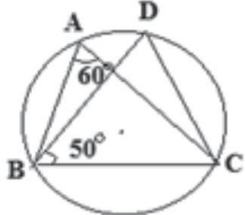


01. Which of the following is false?
 a. The sum of two rational numbers is a rational number.
 b. The product of two rational numbers is a rational number.
 c. The sum of a rational number and an irrational number is an irrational number.
 d. Every real number is a rational number.
02. If $x^3 + 3x^2 + 3x + 1$ is divided by $(x + 1)$, then the remainder is
 a. -8 b. 0 c. 8 d. $1/8$
03. The equation $y = 2x + 1$ has
 a. Only one definite solution b. Two unique solutions
 c. Infinitely many solutions d. No Solution
04. Find the resultant shape obtained by connecting the points $(15, 25)$, $(-10, 25)$, $(0, 5)$ and $(-25, 5)$.
 a. Square b. Trapezium c. Parallelogram d. Rectangle
05. Find the simple interest on Rs.12000 at $50/4\%$ for 8 months.
 a. Rs.2400 b. Rs.1000 c. Rs.1400 d. Rs.1850
06. If the production of sugar is increased from 225 million tons to 243 million tons, what is the percentage increase in sugar production?
 a. 12% b. 18% c. 9% d. 8%
07. When a dice is thrown what is the probability of getting a prime number?
 a. 3 b. 0.3 c. 0.5 d. 0.05
08. The angles of a triangle are in the ratio 5 : 3 : 7. The triangle is
 a. An acute angled triangle b. An obtuse angled triangle
 c. None of these d. An isosceles triangle
09. In the adjoining figure, $AB \parallel CD$ is cut by a transversal l . If $\angle 1 : \angle 2 = 2 : 3$, find the measure of $\angle 1$ and $\angle 2$.
 a. 74° and 106° b. 60° and 120°
 c. 75° and 105° d. 72° and 108°



11. Find the length of a chord which is at a distance of 9 cm from the centre of a circle of radius 15 cm.
a. 24cm b. 22cm c. 12 cm d. 20cm
12. In the given figure, $\triangle ABC$ and $\triangle DBC$ are inscribed in a circle such that $\angle BAC = 60^\circ$ and $\angle DBC = 50^\circ$, Then, $\angle BCD = ?$
a. 50° b. 60°
c. 70° d. 80°
- 
13. If one angle of a parallelogram is 24° less than twice the smallest angle, then the measure of the largest angle of the parallelogram is
a. 68° b. 102° c. 112° d. 136°
14. Find the area of a triangle, two sides of which are 8 cm and 11 cm and its perimeter is 32 cm.
a. $8\sqrt{30} \text{ cm}^2$ b. $4\sqrt{20} \text{ cm}^2$ c. $3\sqrt{50} \text{ cm}^2$ d. $25\sqrt{3} \text{ cm}^2$
15. 15. If $\sin \theta = \cos \theta$, then the value of θ is
a. 0° b. 45° c. 60° d. 90°
16. Find the mode of the data.
12, 5, 19, 5, 16, 20, 25, 23, 15, 20, 14, 22, 24, 20, 19, 32, 33, 20, 35
a. 22 b. 24 c. 20 d. 33

ANSWER KEY

1	d	2	b	3	c	4	c	5	b	6	d	7	c	8	a
9	d	10	c	11	a	12	c	13	c	14	a	15	b	16	c