

SAMPLE PAPER MATHS (CLASS 9)

Q1 If $4^{2x} = 4^{-6}$ then what is value of X?

- a) 1
- b) -1
- c) 2
- d) -2

ANSWER – (c)

Q2 Hero's is the formula used to measure _____ of the triangle?

- a) Area
- b) Interior angle
- c) Exterior angle
- d) Sides

ANSWER – (a)

Q3 The set {x: x is an odd number between 10 and 18}

- a) {11, 12, 13, 15, 17}
- b) {12, 16, 15, 13}
- c) {11, 13, 15, 17}
- d) {12, 14, 1, 18}

ANSWER- (c)

Q4 There are two points A and B indicated on the wall. Point is at height of 2m above the ground of and point B is 4m vertically above the point A. at the certain instant, the angles of elevation of a kite from these points are observed to be 60 and 30, respectively. Find the height of the kite above the ground.

- a) 2m
- b) 4m
- c) 8m
- d) 16m

ANSWER- (c)

Q5 The frequency distribution of a discrete variable X with one missing frequency f is given below:

| | | | | |
|-----------|---|---|---|---|
| x | 1 | 2 | 3 | 4 |
| Frequency | 2 | 3 | F | 5 |

If the arithmetic mean of X is $\frac{29}{8}$, then find value of missing frequency:

- a) 5
- b) 6
- c) 8
- d) 10

ANSWER- (b)

Q6 The value of the expression $3(\sin \theta - \cos \theta)^4 + 6(\sin \theta + \cos \theta)^2 + 4(\sin^6 \theta + \cos^6 \theta)$ is

- a) 11
- b) 12
- c) 13
- d) 0

ANSWER(c)

Q7 A toothed wheel of diameter 50 cm is attached to a smaller wheel of diameter 30 cm. How many revolutions will the smaller wheel make when the larger one makes 15 revolutions?

- a) 18
- b) 20
- c) 25
- d) 30

ANSWER- (c)

Q8 If the equation $k(6x^2 + 3) + rx + 2x^2 - 1 = 0$ and $6k(2x^2 + 1) + px + 4x^2 - 2 = 0$ have both roots common, then the value of $(2r - p)$ is

- a) 0
- b) $\frac{1}{2}$
- c) 1
- d) None of these

ANSWER- (a)

Q9 Let A and B be two finite disjoint sets such that $n(A \cup B) = 475$ and $n(A) = 435$, then $n(B)$ is

- a) 75
- b) 35
- c) 900
- d) 40

ANSWER-(d)

Q10 Let $P(n)$ be a statement and let $P(n) \Rightarrow P(n+1)$ for all-natural numbers n , then $P(n)$ is true for

- a) All $n > m$
- b) All $n > 1$
- c) Nothing can be used
- d) All n

ANSWER(c)

