

MM 25

Time 1 hour

1 mark each

1. A family has 2 children. Find probability of having 1 boy and 1 girl.
2. Find mean of all even prime numbers.
3. Length of an hour hand is 21cm. Find area swept in 5 minutes.
4. A car travels 0.99 km. in which each wheel makes 450 complete revolutions.
Find radius of wheel.
5. Mode = _____ Median - _____ Mean

2 marks each

6. Draw a pair of tangents to a circle of radius 3cm inclined to each other at an angle of 75°

3 marks each

7. A chord of circle of radius 10cm subtends a right angle at the centre of circle. Find area of major segment.
8. Two circles touch internally. Sum of their areas is $116\pi\text{ cm}^2$ and distance between their centres is 6cm. Find radii of the circles.

6 marks each

9. A right circular cone of height 20cm and vertical angle 60° is cut into 2 parts at the middle of its height by a plane parallel to base. The frustum so obtained is drawn into a wire of diameter 0.125 cm. Find length of wire.
10. Find mean by step derivation

Marks below	10	20	30	40	50	60	70	80	90	100
No.of Students	5	9	17	29	45	60	70	78	83	85