



Subject:	MATHEMATICS	Chapter:	Tangents			
Class:	X	Batch:	LOT	LOT 2020 (M-7)	Date:	09/05/2020
No. of Questions:		Type:	Descriptive	Mark:	20	Time: 45 mts

ANSWER KEY

1. a) $BC = 10 \text{ cm}$

$$AB = ?$$

$$BC \times BD = AB^2$$

$$10 \times 3.6 = AB^2$$

$$36 = AB^2$$

$$AB = 6 \text{ cm}$$

b) $AC = 8 \text{ cm}$

$$\text{Radius / ആരം} = 4 \text{ cm}$$

2. $\angle A = 20^\circ$

$$\angle B = 80^\circ$$

$$\angle C = 80^\circ$$

3. a) Perimeter / ചുറ്റളവ്

$$P = 9 + 12 + 15$$

$$(\text{Hypotenuse / കർണ്ണം} = 15 \text{ cm})$$

$$P = 36 \text{ cm}$$

$$b) A = \frac{1}{2} \times b \times h = \frac{1}{2} \times 12 \times 9 = 54 \text{ cm}^2$$

$$c) r = A/5 = 54/18 = 3 \text{ cm}$$

4. a) $PA \times PB = PC^2$

$$PA = \frac{PC^2}{PB} = \frac{12^2}{8}$$

$$= \frac{144}{8}$$

$$PA = 18 \text{ cm}$$

$$b) QA \times QB = QC^2$$

$$QA = PA + PQ = 18 + 2 = 20$$

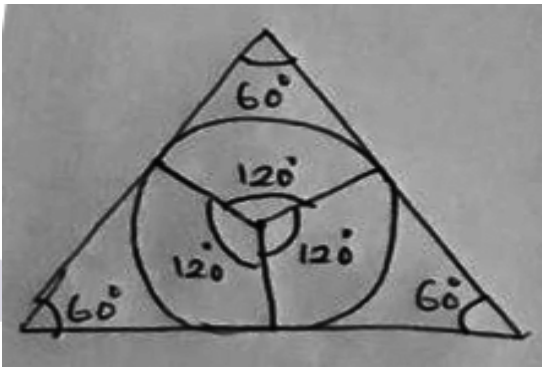
$$QB = PB + PQ = 8 + 2 = 10$$

$$20 \times 10 = QC^2$$

$$200 = QC^2$$

$$QC = \sqrt{200} = 10\sqrt{2} \text{ cm}$$

5.



6.

