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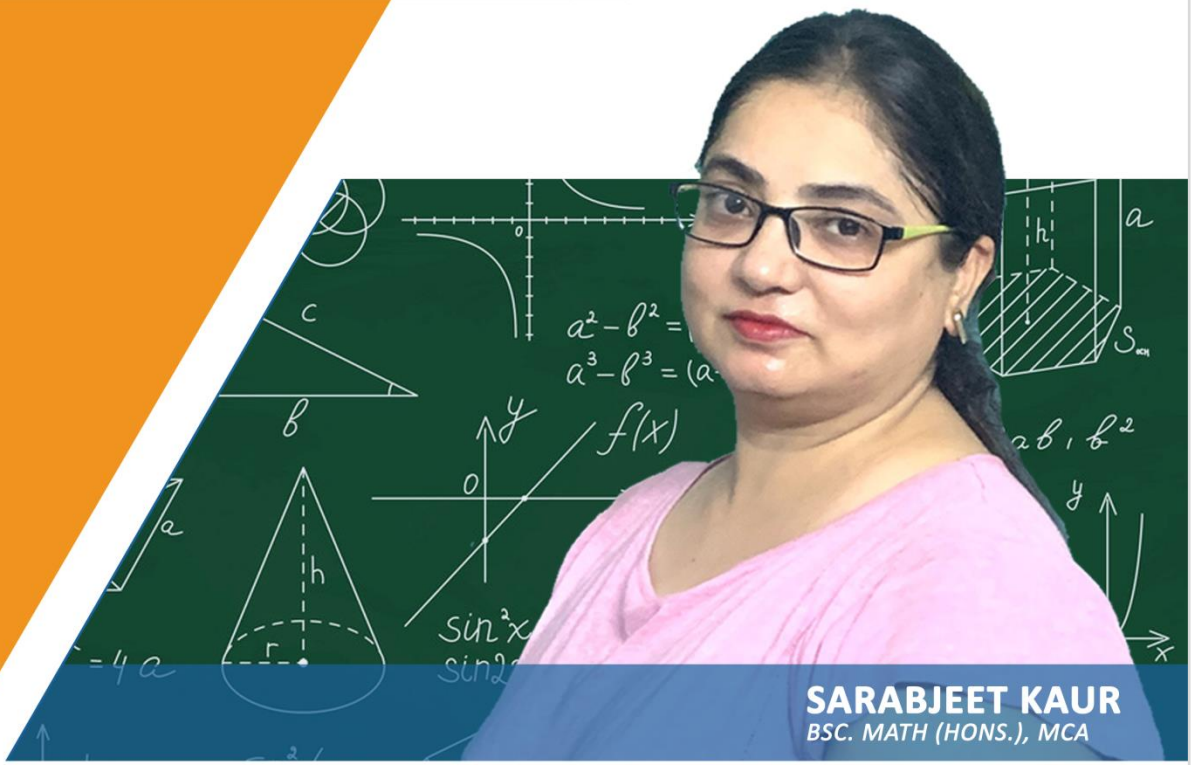

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BSC. MATH (HONS.), MCA

GRADE 9TH MATHS
CHAPTER 7

Triangles

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MULTIPLE-CHOICE QUESTIONS (MCQ)

Choose the correct answer in each of the following questions:

1. In a $\triangle ABC$, if $3\angle A = 4\angle B = 6\angle C$ then $A : B : C = ?$

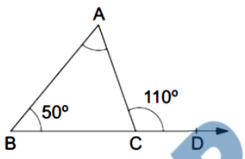
(a) 3 : 4 : 6 (b) 4 : 3 : 2 (c) 2 : 3 : 4 (d) 6 : 4 : 3

2. In a $\triangle ABC$, if $\angle A - \angle B = 42°$ and $\angle B - \angle C = 21°$ then $\angle B = ?$

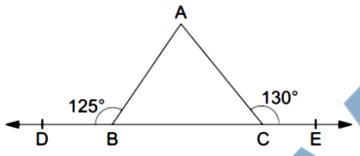
(a) 32° (b) 63° (c) 53° (d) 95°

3. In a $\triangle ABC$, side BC is produced to D. If $\angle ABC = 50°$ and $\angle ACD = 110°$ then $\angle A = ?$

(a) 160° (b) 60°
(c) 80° (d) 30°



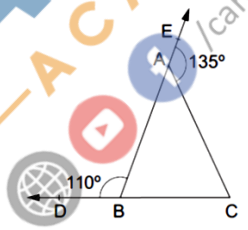
4. Side BC of $\triangle ABC$ has been produced to D on left and to E on right-hand side of BC such that $\angle ABD = 125°$ and $\angle ACE = 130°$. Then, $\angle A = ?$



(a) 50° (b) 55° (c) 65° (d) 75°

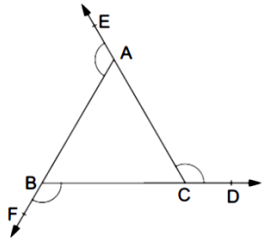
5. In the given figure, the sides CB and BA of $\triangle ABC$ have been produced to D and E respectively such that $\angle ABD = 110°$ and $\angle CAE = 135°$. Then, $\angle ACB = ?$

(a) 65° (b) 45°
(c) 55° (d) 35°



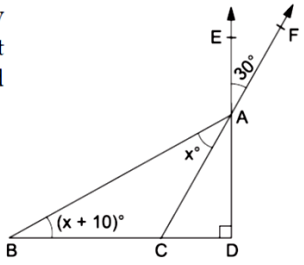
6. The sides BC, CA and AB of $\triangle ABC$ have been produced to D, E and F respectively. $\angle BAE + \angle CBF + \angle ACD = ?$

(a) 240° (b) 300°
(c) 320° (d) 360°

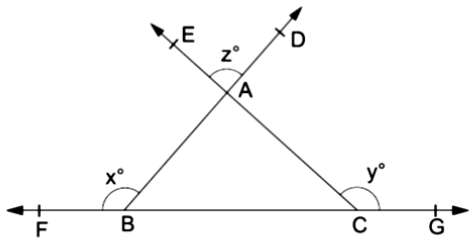


7. In the given figure, $EAD \perp BCD$. Ray FAC cuts ray EAD at a point A such that $\angle EAF = 30°$. Also, in $\triangle BAC$, $\angle BAC = x°$ and $\angle ABC = (x + 10)°$. Then, the value of x is

(a) 20 (b) 25
(c) 30 (d) 35

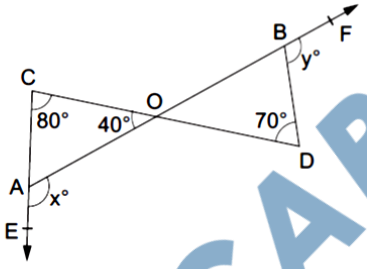


8. In the given figure, two rays BD and CE intersect at a point A. The side BC of $\triangle ABC$ have been produced on both sides to points F and G respectively. If $\angle ABF = x°$, $\angle ACG = y°$ and $\angle DAE = z°$ then $z = ?$



(a) $x + y - 180$ (b) $x + y + 180$ (c) $180 - (x + y)$ (d) $x + y + 360°$

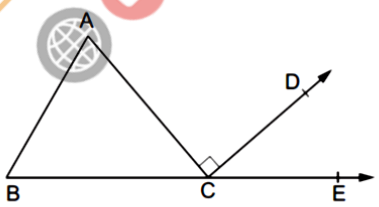
9. In the given figure, lines AB and CD intersect at a point O. The sides CA and OB have been produced to E and F respectively such that $\angle OAE = x°$ and $\angle DBF = y°$.



If $\angle OCA = 80°$, $\angle COA = 40°$ and $\angle BDO = 70°$ then $x° + y° = ?$

(a) 190° (b) 230° (c) 210° (d) 270°

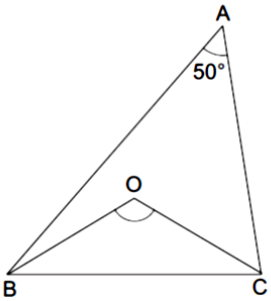
10. In a $\triangle ABC$, it is given that $\angle A : \angle B : \angle C = 3 : 2 : 1$ and $\angle ACD = 90°$. If BC is produced to E then $\angle ECD = ?$



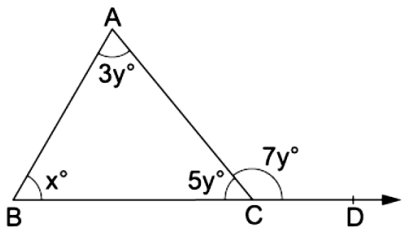
(a) 60°
(b) 50°
(c) 40°
(d) 25°

11. In the given figure, BO and CO are the bisectors of $\angle B$ and $\angle C$ respectively. If $\angle A = 50°$ then $\angle BOC = ?$

(a) 130° (b) 100°
(c) 115° (d) 120°



12. In the given figure, side BC of $\triangle ABC$ has been produced to a point D. If $\angle A = 3y°$, $\angle B = x°$, $\angle C = 5y°$ and $\angle CBD = 7y°$. Then, the value of x is



(a) 60 (b) 50

(c) 45 (d) 35