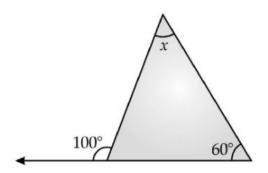


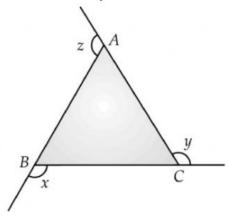
## Concept\_Grade-9\_Lines and Angles

## Triangle

- 1. An exterior angle of a triangle is 80° and two interior opposite angles are equal. What will be the measure of each?
- 2. What is the value of x in the figure given below?



3. In the figure below, if x, y and z are exterior angles of  $\triangle ABC$ , then calculate the value of x + y + z.

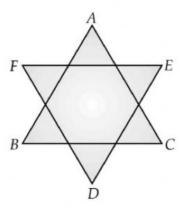


4. In  $\triangle ABC$ ,  $\angle A = \angle B/2 = \angle C/6$ , then what will be the measure of  $\angle A$ ?

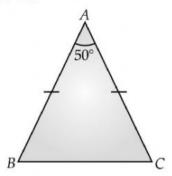




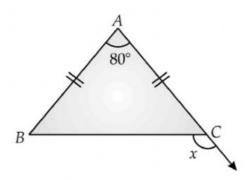
5. In the figure below, if  $\angle A + \angle B + \angle C + \angle D + \angle E + \angle F = k$  right angles, then what is the value of k?



6. In the given figure, ABC is an isosceles triangle with AB = AC and  $\angle A = 50^{\circ}$ . Calculate  $\angle B$ 



7. In the fig. below, in  $\triangle ABC$ , AB = AC, then calculate the value of x.



8. In  $\triangle ABC$ ,  $\angle A + \angle B = 65^{\circ}$  and  $\angle B + \angle C = 140^{\circ}$ , find the value of  $\angle B$  and  $\angle C$ 





- 9. In figure, PQ  $\perp$ PR, QP II RL,  $\angle$ RQT = 38° and  $\angle$ QTL = 75°. Find x and y
- 10. In  $\triangle ABC$ , if  $\angle A = (2x 5^\circ)$ ,  $\angle B = (5x + 5^\circ)$ ,  $\angle C = (3x + 50^\circ)$ , then find the value of x,  $\angle A$ ,  $\angle B$  and  $\angle C$ .

