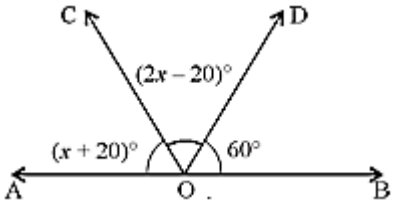
LINES AND ANGLES CM090601

Multiple Choice Questions : **1 mark each**

1. In the figure, AOB is a straight line. The measure of ∠COD is equal to :

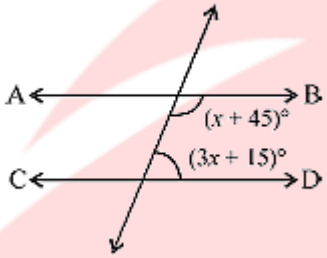


(a) 60° (b) 80° (c) 120° (d) 160°

2. If one of the four angles formed by two intersecting lines is a right angle, then each of four angles is:

(a) an acute angle (b) a right angle (c) an obtuse angle (d) none of these

3. In the given figure, AB|| CD, the value of *x* is equal to:



(a) 60° (b) 75° (c) 45° (d) 30°

4. Angles of a triangle are in the ratio 2 : 4 : 3. The smallest angle of the triangle is:

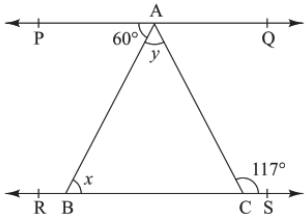
(a) 60° (b) 40° (c) 80° (d) 20°

5. Find the measure of the angle which is complement of itself.

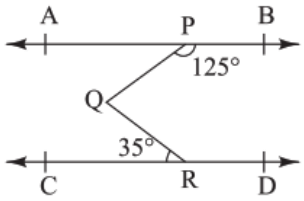
(a) 30° (b) 90° (c) 45° (d) 180°

Very Short Answer Type Questions : **2 marks each**

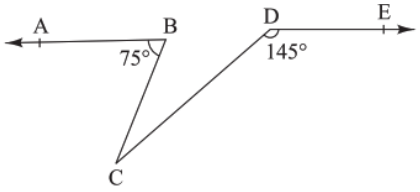
6. In the figure, if PQ||RS, ∠PAB = 60° and ∠ACS = 117°, then find (x – y).



7. In the figure, if AB||CD, then find ∠PQR.



8. In the figure, AB||DE, ∠ABC = 75° and ∠CDE = 145°, then find ∠BCD.

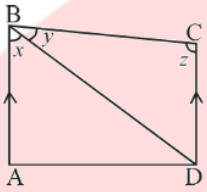


Short Answer Type Questions : **3 marks each**

9. In ΔABC, if ∠A – ∠B = 15°, ∠B – ∠C = 30°, find ∠A, ∠B and ∠C.

10. A triangle ABC is right angled at A. L is a point on BC such that AL ⊥ BC. Prove that ∠BAL = ∠ACB.

11. In the given figure, AB||DC. If $x = \frac{4}{3}y$ and $y = \frac{3}{8}z$, find the values of x, y and z.



Long Answer Type Questions : **5 marks each**

12. P is a point equidistant from two lines l and m intersecting at a point A. Show that AP bisects the angle between them.

13. In the figure, l||m, show that ∠1 + ∠2 – ∠3 = 180°.