BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA.
JULY ASSIGNEMENT
CLASS- IX (MATHEMATICS)
TOPICS: LINES AND ANGLES AND TRIANGLES

SECTION –A (MULTIPLE CHOICE QUESTIONS)

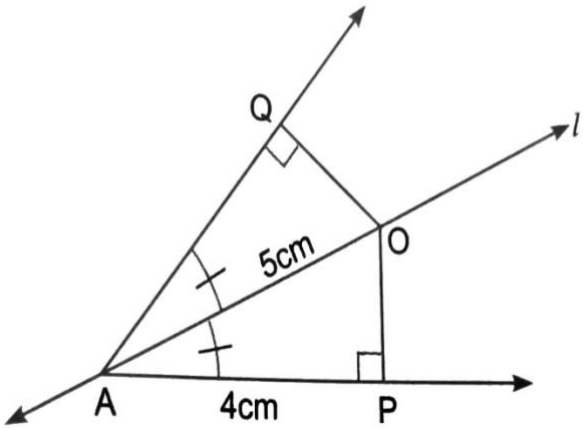
1. Two angles are supplementary. One of them is an acute angle. Which of these could be the measure of other angle?

   (a) 60°
   (b) 120°
   (c) 200°
   (d) 240°

2. Which of the following is not a criterion for Congruence of triangles?

   (a) SAS
   (b) ASA
   (c) SSA
   (d) SSS

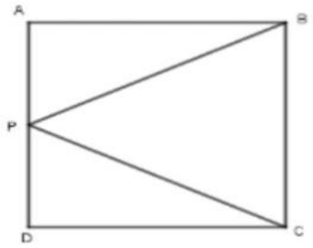
3. In the given figure, line l is bisector of angle A , then OQ is equal to

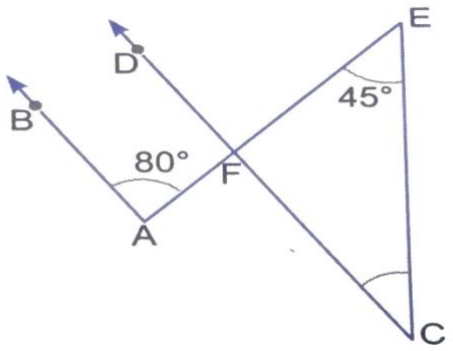
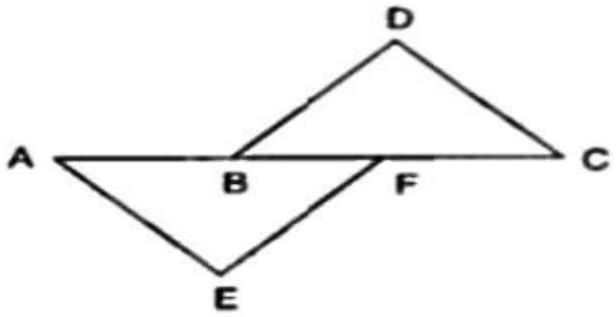
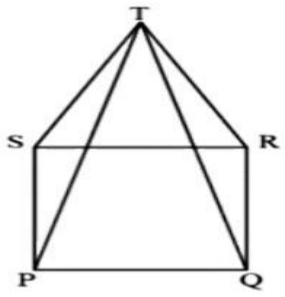


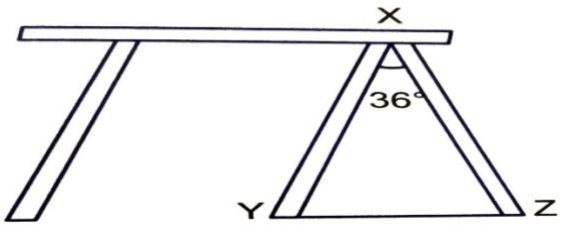
   (a) 4 cm
   (b) 12 cm
   (c) 13 cm
   (d) 3 cm

SECTION – B(2 MARKS QUESTIONS)

4. In the given figure , ABCD is a square and P is the midpoint of AD. BP and CP are joined. Prove that ∠ PCB = ∠ PBC



5.	Find the angle which is one-fifth of its complement.
	SECTION – C (3 MARKS QUESTIONS)
6.	In the given figure, AB || CD , Find the value of ∠FCE. 
7.	In figure, it is given that AB = CF , EF = BD and ∠AFE = ∠CBD. Prove that ΔAFE ≅ ΔCBD. 
	SECTION – D (5 MARKS QUESTIONS)
8.	In the figure, PQRS is a square and SRT is an equilateral triangle, prove that (i) PT = QT (ii) ∠TQR = 15° 
9.	ABC is a triangle with ∠B = 2 ∠C. D is a point on BC such that AD bisects ∠BAC and AD = CD. Prove that ∠BAC = 72°.

SECTION – E (CASE STUDY)	
10.	CASE STUDY An aluminium ladder manufacturing company manufacturers foldable step ladder shown in the figure. The length XY and XZ are each equal to 110 cm and the vertical angle is 36°.  (a) Find the ratio of ∠YXZ to ∠XZY (b) If ∠YXZ is 60°, then find length of side YZ. (c) Which type of triangle is ∆ XYZ?