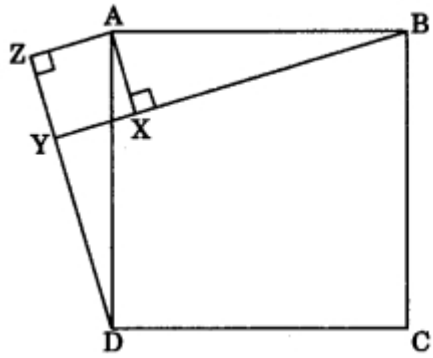
TRIANGLES

Q 1 In figure X is a point in the interior of square ABCD, AXYZ is also a square. If DY = 3 cm and AZ = 2 cm, then find BY.

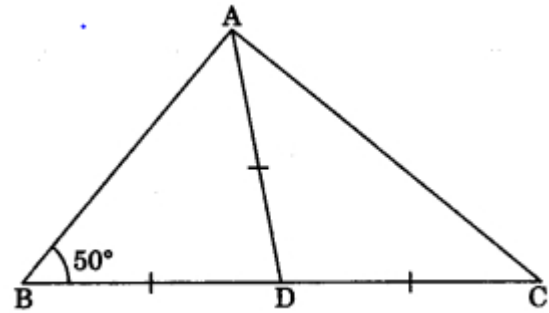


(a) 5 cm
(b) 6 cm
(c) 7 cm
(d) 8 cm

Q 2 .In ΔABC, ∠C = ∠A and BC = 4 cm and AC = 5 cm, then find length of AB.
(a) 5 cm
(b) 3 cm
(c) 4 cm
(d) 2.5 cm

Q 3In ΔABC, AB = AC and ∠B = 50°, then find ∠C.
(a) 50°
(b) 40°
(c) 80°
(d) 120°

Q 4 In figure, D is the mid-point of side BC of a ΔABC and ∠ABD = 50°. If AD = BD = CD, then find the measure of ∠ACD.



a) 30°
(b) 70°
(c) 80°
(d) 40

Q 5 D is a point on the side BC of a ΔABC such that AD bisects ∠BAC. Then
(a) BD = CD
(b) BA > BD
(c) BD > BA
(d) CD > CA

Q 6 Two sides of a triangle are of lengths 5 cm and 1.5 cm. The length of the third side of the triangle cannot be
(a) 3.6 cm
(b) 4.1 cm
(c) 3.8 cm
(d) 3.4 cm

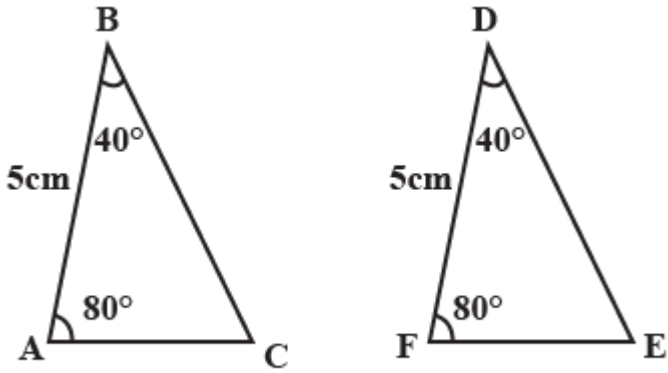
Q7 In ΔPQR, if ∠R > ∠Q, then
(a) QR > PR
(b) PQ > PR
(c) PQ < PR
(d) QR < PR

Q 8 In triangles ABC and PQR, AB = AC, ∠C = ∠P and ∠B = ∠Q. The two triangles are

(a) isosceles but not congruent
(b) isosceles and congruent
(c) congruent but not isosceles
(d) neither congruent nor isosceles

Question 9.In triangles ABC and DEF, AB = FD and ∠A = ∠D. The two triangles will be congruent by SAS axiom if
(a) BC = EF
(b) AC = DE
(c) AC = EF
(d) BC = DE

Q 10 It is given that ΔABC = ΔFDE and AB = 5 cm, ∠B = 40° and ∠A = 80°. Then which of the following is true?
(a) DF = 5 cm, ∠F = 60°
(b) DF = 5 cm, ∠E = 60°
(c) DE = 5 cm, ∠E = 60°
(d) DE = 5 cm, ∠D = 40°



Congruent triangles

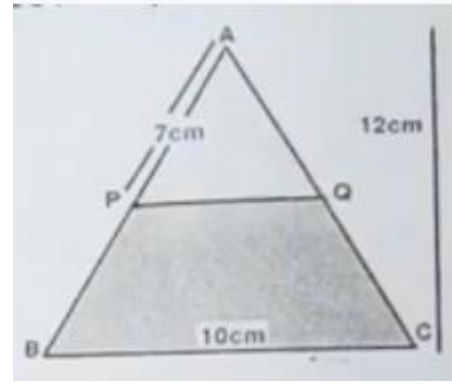
Question 11 Two sides of a triangle are of lengths 5 cm and 1.5 cm. The length of the third side of the triangle cannot be
(a) 3.6 cm
(b) 4.1 cm
(c) 3.8 cm
(d) 3.4 cm

Question 12 In ΔPQR, if $\angle R > \angle Q$, then
(a) QR > PR
(b) PQ > PR
(c) PQ < PR
(d) QR < PR

CASE STUDY

Q14 Raj is having triangular open space in his plot . He divided the land in to two parts by drawing the boundary PQ, WHERE PQ parallel BC.
P is the id point of side AB, other measures are given as Height of triangle is 12 cm, AP = 7 cm, BC = 10 cm, AC= 11 cm, find

1. Area of triangle ABC is



    a. 50 square cm
    b. 60 square cm
    c. 70 square cm
    d. 55 square cm
2. Length of side PQ
    a. 5 cm
    b. 6 cm
    c. 12 cm
    d. 8 cm
3. Length of AQ is
    a. 7 cm
    b. 5.5 cm
    c. 6 cm
    d. 6.5 cm
4. Length of PB is
    a. 7 cm
    b. 6 cm
    c. 8 cm
    d. 9 cm

ANSWERS

Q1 C
Q2 C
Q3 A
Q4 D
Q5 B
Q6 D
Q7 B
Q8 A
Q9B
Q10 B
Q11 D
Q12 B
Q13 (1) B
(2) A
(3) B
(4) A