Similarities MCQ

Question 1.

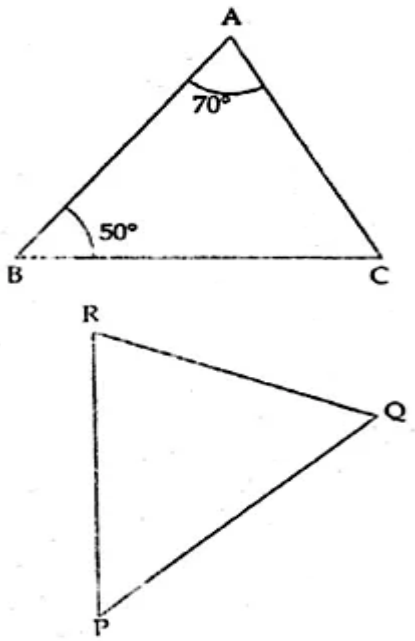
In the given figure, ΔABC ~ ΔQPR. Then ∠R is

(a) 60°

(b) 50°

(c) 70°

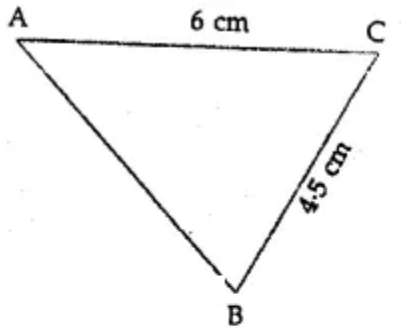
(d) 80°

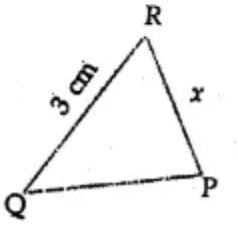


Question 2.

In the given figure, ΔABC ~ ΔQPR. The value of x is

(a) 2.25 cm
(b) 4 cm
(c) 4.5 cm
(d) 5.2 cm





Question 3.

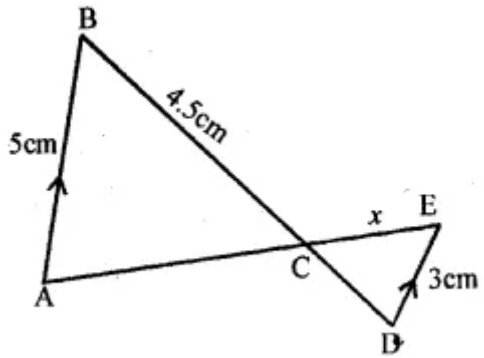
In triangles ABC and DEF, ∠B = ∠E, ∠F = ∠C and AB = 3DE, then the two triangles are

(a) congruent but not similar
(b) similar but not congruent
(c) neither congruent nor similar
(d) congruent as well as similar

Question 4.

The given figure, AB || DE. The length of CD is

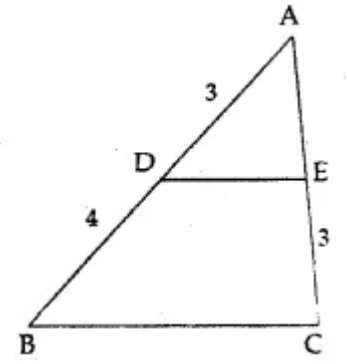
(a) 2.5 cm
(b) 2.7 cm
(c) 10/3 cm
(d) 3.5 cm



Question 5.

In the given figure, DE || BC and all measurements are in centimetres. The length of AE is

(a) 2 cm
(b) 2.25 cm
(c) 3.5 cm
(d) 4 cm



Question 6.

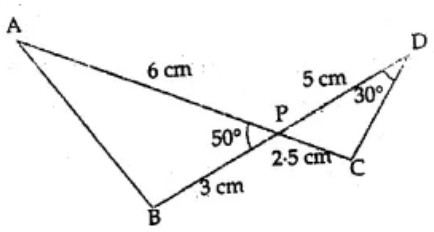
It is given that ΔABC ~ ΔPQR with
$\frac{BC}{QR} = \frac{1}{3}$
then
$\frac{area \quad of \quad \Delta PQR}{area \quad of \quad \Delta ABC}$
equal to

(a) 9
(b) 3
(c) $\frac{1}{3}$
(d) $\frac{1}{9}$

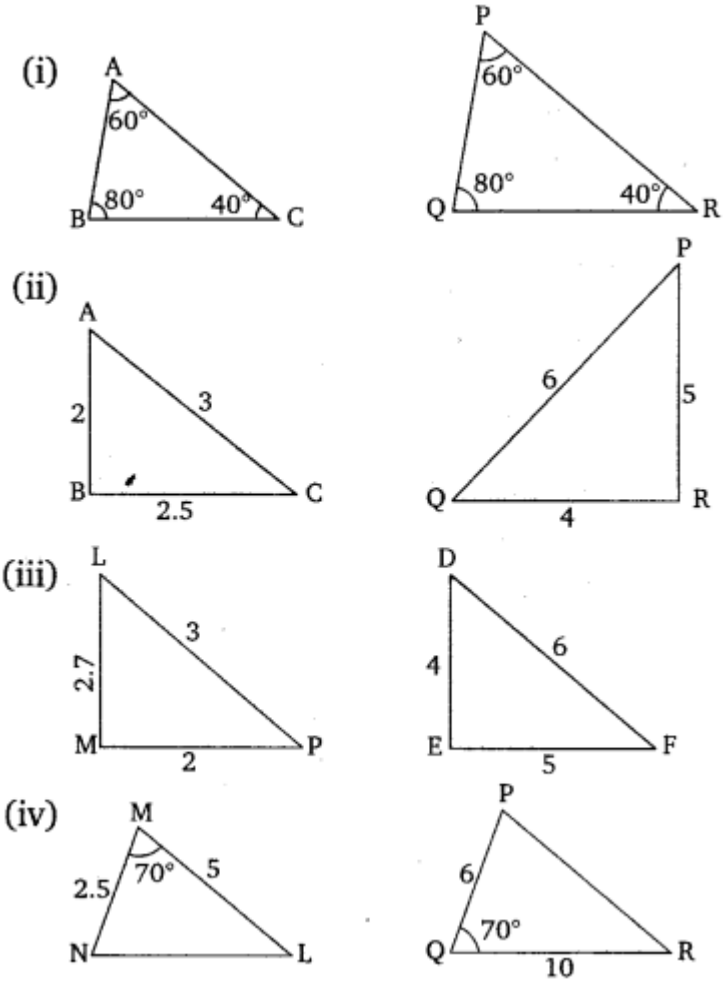
Question 7.

In the given figure, two line segments AC and BD intersect each other at the point P such that PA = 6 cm, PB = 3 cm, PC = 2.5 cm, PD = 5 cm, ∠APB = 50° and ∠CDP = 30°. Then, ∠PBA is equal to

(a) 50°
(b) 30°
(c) 60°
(d) 100°



Q) 8 State which pairs of triangles in the given figures are similar.



Q 19.If in triangles ABC and DEF , AB/EF = AC/DE, then they will be similar when

(a) angle A = angle D

(b) angle A = angle E

(c) angle B = angle E

(d) angle C = angle F

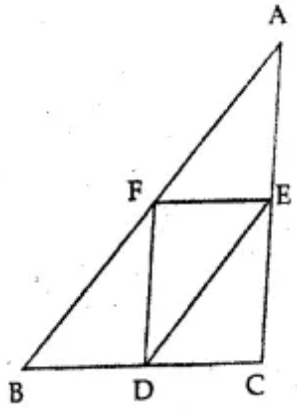
Q)10

If triangle ABC is similar to triangle EDF, then which of the following is not true ?

(a) BC.DE = AB.EF
(b) AB.EF = AC.DE
(c) BC.EF = AC.FD
(d) BC.DE = AB.FD

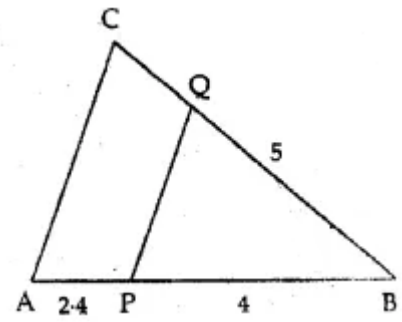
Q)11

In the given figure, if D, E and F are midpoints of the sides BC, CA and AB respectively, then the two triangles ABC and DEF are
(a) similar
(b) congruent
(c) both similar and congruent
(d) neither similar nor congruent



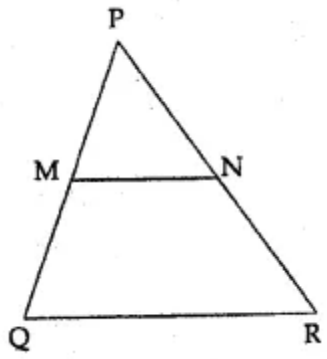
Q)12

In the given figure, PQ || CA and all lengths are given in centimetres. The length of BC is
(a) 6.4 cm
(b) 7.5 cm
(c) 8 cm
(d) 9 cm



Q)13

In the given figure, MN || QR. If PN = 3.6 cm, NR = 2.4 cm and PQ = 5 cm, then PM is
(a) 4 cm
(b) 3.6 cm
(c) 2 cm
(d) 3 cm



Q)14

If triangle ABC is congruent to triangle PQR , then which of the following statement/s is not true ?

a. Triangle ABC is similar to Triangle PQR
b. Triangle ABC is congruent to Triangle PQR
c. Triangle ABC is both similar and congruent to Triangle RPQ
d. Both a and b

Q)15

If triangle ABC is similar to triangle DEF and angle A = 45 degrees, angle E = 87 degrees, then angle c =?

a. 45 degrees
b. 87 degrees
c. 48 degrees
d. Cannot be determined.

Q)16

A vertical pole 40m long casts a shadow 20m long on the ground. At the same time, a __ tower casts a shadow 50 m long on the ground.

e. 100m
f. 50m
g. 25m
h. 150m