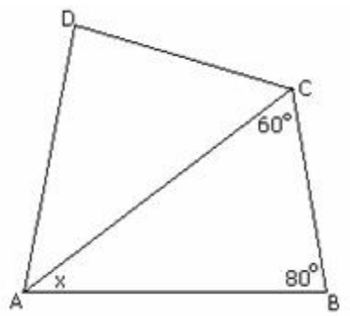
<1M>

1.In the given figure find the value of x.

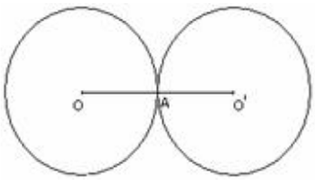


(A) $50°$ (B) $40°$ (C) $60°$ (D) $45°$

2.Fill in the blank:

The perpendicular bisectors of the sides of a triangle are…….

3.What is the measure of line segment OO^{I} in the given figure? If OA and AO^{I} are both 3 cm.



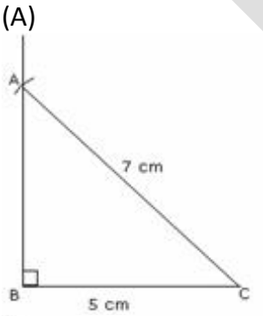
(A) 6 cm (B) 4 cm (C) 8 cm (D) 2 cm

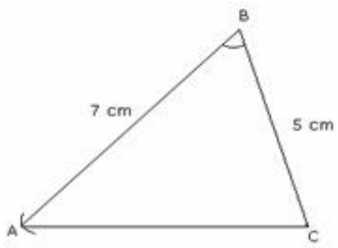
4.In triangle ABC, AB = 3 cm, BC = 9 cm and CA = 4 cm.
triangle ABC can be construct?

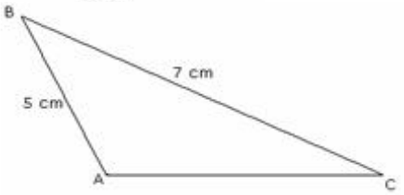
(A) Yes (B) No (C) Might be (D) None of these

5."A right-angled triangle, whose hypotenuse is 7 cm long and one of the other legs is 5 cm long". Which of the figure is satisfied the above statement?

(A) (B) (C)





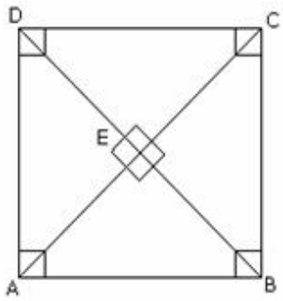


(D) None of these

6.If two angles and one side are given in a triangle, then is it possible to construct a triangle?

(A) No (B) Yes (C) Might be (D) None of these

7.How many right triangles in the given figure

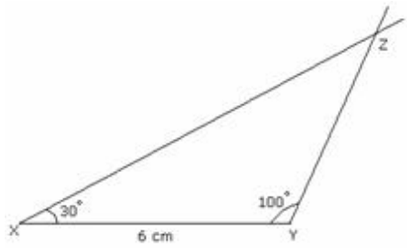


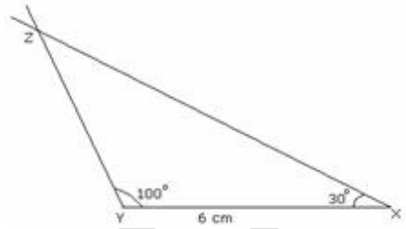
(A) 4 (B) 8 (C) 2 (D) 6

8.How many equal right triangles which have maximum area cut out from a square sheet?

(A) 2 (B) 3 (C) 4 (D) 8

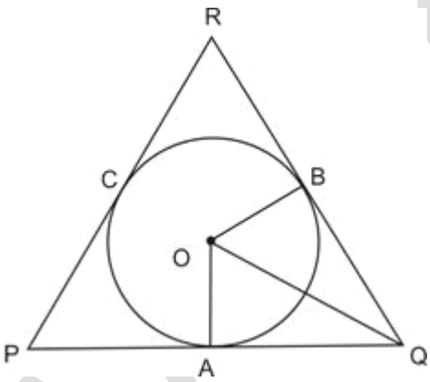
9.Which of the construction of triangle XYZ is true in the following figure, given that XY = 6 cm $|m\angle ZXY = 30°\ and\ m\angle XYZ = 100°.$

(A) 

(B) 

(C) Both of (1) and (2) (D) None of them

10.In the given figure radius of the circle is…….

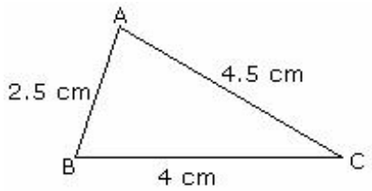


(A) OA (B) OQ (C) OB (D) Both (1) and (3)

11.Which statement is true in the following statements?
(A) Opposite vertically angles are not equal.
(B) Angle sum property hold in triangle.
(C) Sum of two sides of a triangle less than the third side.
(D) None of these

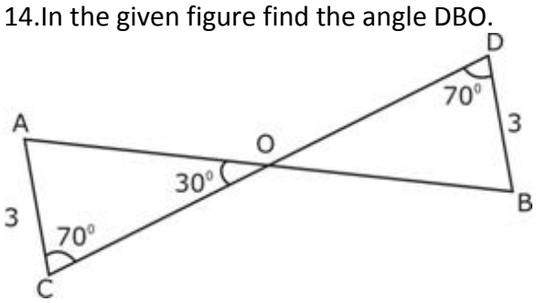
12.Which of the following statement is true in the following statements?
(A) Pyramid is 2-dimension figure and triangle is 3-dimension figure.
(B) Pyramid has 4 vertices and triangle has 3 vertices.
(C) Pyramid is 3-dimension solid figure and triangle is 2-dimension plane figure.
(D) Pyramid has 4 sides and triangle has 3 sides

13.Find the perimeter of the given triangle.



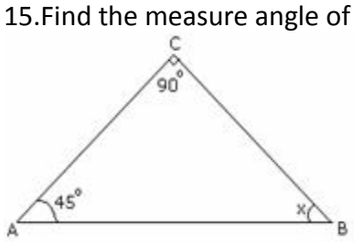
(A) 10 cm (B) 9 cm (C) 11 cm (D) 12 cm

14.In the given figure find the angle DBO.



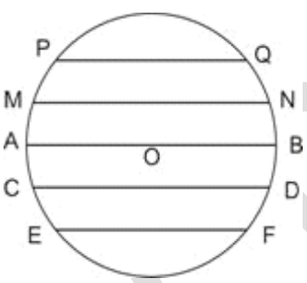
(A) $90°$ (B) $60°$ (C) $80°$ (D) $35°$

15.Find the measure angle of x in the given triangle.



(A) 35 degree (B) 45 degree (C) 60 degree (D) 25 degree

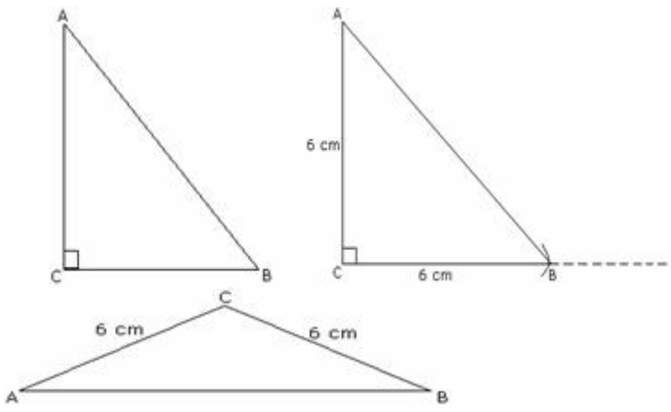
16.Which is the longest chord in the given figure? If O is the centre of the circle?



(A) AB (B) CD (C) MN (D) PQ

17.Which statement is true in the following statement?
(A) The total measure of the three angles of a triangle is greater than 180^o
(B) The sum of the lengths of any two sides of a triangle is less than the length of the third side.
(C) In any right-angled triangle, the square of the length of hypotenuse is equal to the sum of the square of the length of the other two sides.
(D) None of these

18.Which of the following figure represent an isosceles right-angled triangle ABC? where angle ACB = 90^o and AC = 6 cm.
(A) (B) (C)



(D) None of these

19.In ΔABC , the side included between $\angle$B and $\angle$ C is AB.

20.If AB = QP, $\angle$ B = $\angle$ P, BC = PR, then by ……. Congruence condition $\Delta ABC \cong \Delta RPQ$.

21.The in-centre of a triangle lies in the …….. of the triangle.

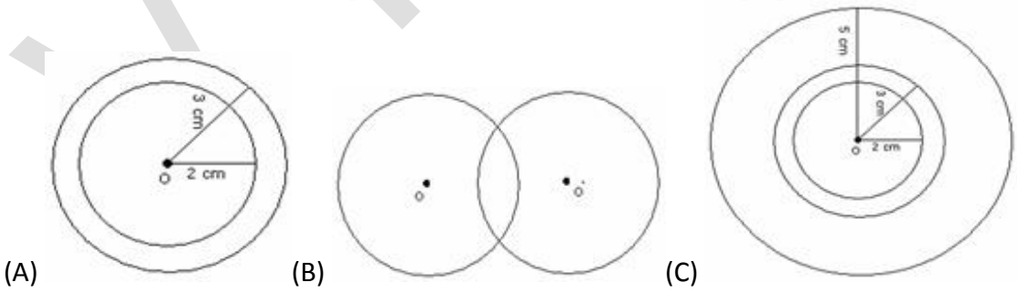
22.The point of concurrence of the Medians of a triangle is called median of the triangle. (True/False)

23.State true or false:
The angle bisectors of a triangle are concurrent.

24.In triangle DEF, given that DE = 4.5 cm, EF = 5.5 cm and DF = 4 cm, can triangle DEF be construct?
(A) No (B) Yes (C) Might be (D) None of these

25.60^{o} angle constructed by……
(A) Compass (B) Protractor (C) Both (1) and (2) (D) None of them

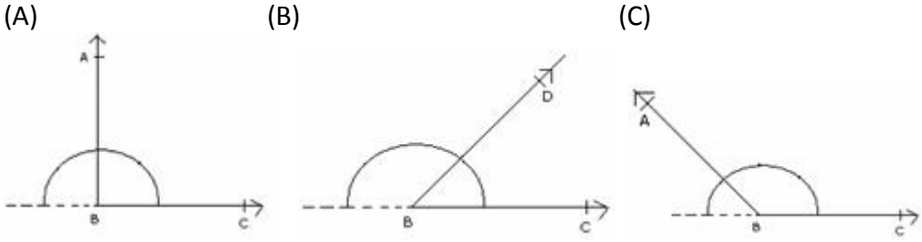
26.Which of the circles having the same centre in the following figures?



(A) (B) (C)

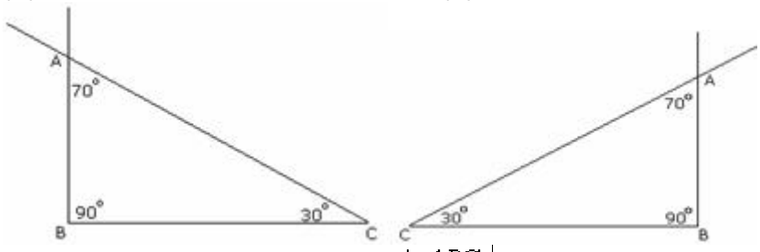
(D) Both (1) and (3)

27.Which angle is of 90^{o} in the following angles?
(A) (B) (C)



(D) none of these

28.In triangle ABC,
$\angle ABC = 90°, \angle BCA = 30°$ *and* $\angle BCA = 70°$ $\angle BAC = 70°$
The figure of triangle ABC is
(A) (B)



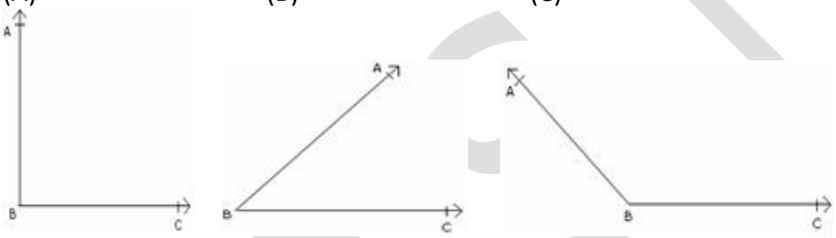
(C) Both of them (D) ΔABC can not be construct.

29.How many circles can be drawn from one centre?
(A) 1 (B) 2 (C) 3 (D) Countless

30.40° angle can be construct by …….
(A) Compass (B) Protractor (C) Divider (D) Set-square

31.Which statement is true in the following statement?
(A) An equilateral triangle has each angle 60°. (B) All sides are not equal in equilateral triangle.
(C) Both (a) and (b) (D) None of them

32.Which angle is acute angle in following angles?<!--[if gte mso 9]-->
(A) (B) (C)



(D) None of these

33.In triangle ABC, given that AB = 3 cm, BC = 4 cm and AC = 5 cm triangle ABC is
(A) Isosceles triangle (B) Right triangle (C) Scalene triangle (D) None of them

<2M>
34.In ΔABC, BC = CA. Which of its two angles are equal?

35.In triangle DEF angle E = angle F . Which of its two sides are equal?

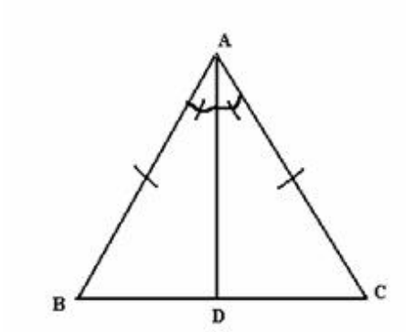
36.Construct a right triangle PQR in which $\angle$ Q = $90°$, PR = 6cm andQR = 4cm.

37.Construct a ΔABC, in which $\angle$ B = $70°$, AB = 4.8cm and BC = 5.2cm.

<3M>
38.Construct ΔXYZ in which XY = 4.5cm, YZ = 5cm and ZX = 6cm.

39. ΔABC is isosceles with AB = AC as shown in figure. Line segment AD bisects $\angle$ A and meets base BC in D. Find the three pairs of corresponding parts which make $\Delta ADB \cong \Delta ABC$ by SAS congruence condition.

Is it true to say that BD = DC?

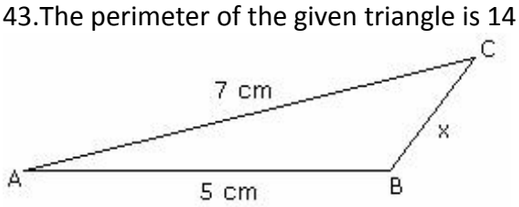


40.In ΔPQR ,QP = QR. If $\angle$ P = $36°$, what is the measure of $\angle$ Q?

41.Draw a line, say AB, take a point C outside it. Through C, draw a line parallel to AB using ruler and compass only.

42.find which of the following are sides of a right triangle. All dimensions are in cm. 1) 0.25, 0.6, 0.65
2) 1, 1, 2 3) 12, 35, 37

43.The perimeter of the given triangle is 14 cm, then find the value of x.



(A) 3 cm (B) 4 cm (C) 6 cm (D) 2 cm

<5M>
44.construct a right -angled triangle in which base is 5.5 cm and the hypotenuse makes an angle of 30° with the base. Measure the other sides of the triangle.

45.Construct ΔLMN, right-angled at M, given that LN = 5cm and MN = 3cm.

46.A ladder 17m long when set against the wall of a house just reaches a window at a height of 15m from the ground. How far is the lower end of the ladder from the base of the wall?

47.In Fig. AB || DC and AB = DC.
a. Is $\angle$ BAC = $\angle$ DCA? Why? b. Is $\Delta ABC \cong \Delta CDA$ by SAS congruence condition?
c. State the three facts you have used to answer (ii).

48.construct a Δ ABC in which AC = CB = 4 cm and B = 45°. Is this a right -angled triangle?