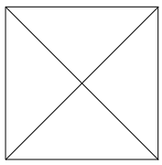
<1M>

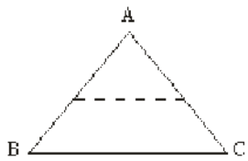
1.If in a $\triangle$ ABC, AB = 4 cm, CA = 7 cm and BC = 5 cm. Can that triangle be valid?
(A) Yes (B) No (C) Might be (D) Can't say

2.In the given figure the value of x and y are …… respectively.



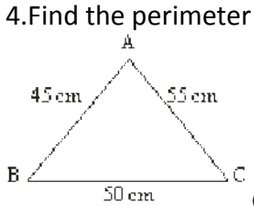
(A) 75^o, 45^o (B) 80^o, 50^o (C) 85^o, 50^o (D) 95^o, 45^o

3.Find $\angle$ ACB in the given Isosceles triangle where AB=AC, if $\angle$ ABC = 50^o.



(A) 80^o (B) 60^o (C) 70^o (D) 50^o

4.Find the perimeter of the given triangle.



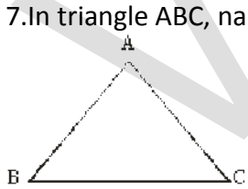
c

(A) 150 cm (B) 165 cm (C) 78 cm (D) 165 cm

5.Can a triangle have two right angles?
(A) Yes (B) No (C) Might be (D) Can't say

6.What are the properties of a triangle?
(A) A triangle is a simple closed curve made of 3 lines. (B) A triangle has 3 vertices.
(C) A triangle has 3 angles. (D) All of them.

7.In triangle ABC, name the vertex opposite of the side BC.



(A) B (B) C (C) A (D) None of them

8.According to Pythagoras, if one side is 4cm and the other is 3cm, then the length of the hypotenuse is _____.
(A) 4 cm (B) 5 cm (C) 6 cm (D) 7 cm

9.Can you have a triangle with all the angles less than 60^o?
(A) No (B) Yes (C) Might be (D) Can't say

10.Can we form an exterior angle on every vertex of a triangle?
(A) No. (B) Yes. (C) Might be. (D) None of them.

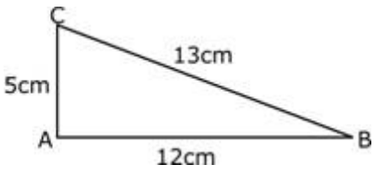
11.Define hypotenuse?

(A) The side opposite to an acute angle. (B) The side opposite to a right angle.
(C) Longest side of a right angle triangle (D) 2 and 3 both

12.Sum of three angles of a triangle is equal to _____

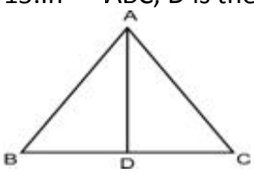
13.What will be the measurement of each angleof an equilateral triangle?

14.Find the perimeter of the given triangle.



(A) 25 cm (B) 30 cm (C) 25 m (D) 15 cm

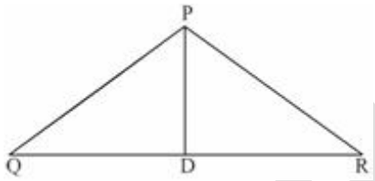
15.In $\triangle$ABC, D is the mid-point of BC. Then AD will be …….



(A) Altitude (B) Median (C) Side of triangle ABC (D) None of them

16.The sum of the lengths of any two sides of a triangle is _____ than the 3rd side of triangle.
(A) less (B) equal (C) more (D) None of them

17.In isosceles $\triangle$PQR, D is the mid point of QR and PD is a _____.

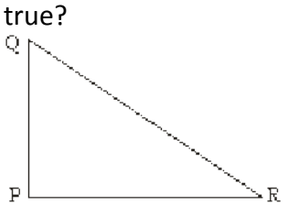


(A) perpendicular (B) bisector (C) median (D) 1 and 3 both

18.What do you mean by perimeter in triangle?
(A) The sum of all the 3 angles of a triangle. (B) The sum of all the 3 sides of a triangle.
(C) The sum of all the sides and angles of a triangle. (D) None of them

19.Pythagoras property hold only if the triangle is _____.
(A) Right angled triangle (B) Obtuse angled triangle
(C) Acute angled triangle (D) None of them

20.Angles Q and R of $\triangle$PQR are 25^o and 65^o respectively. Which of the statement is true?



(A) Square of PQ + Square of QR = Square of RP (B) Square of PQ + Square of PR = Square of QR
(C) Square of PR + Square of QR = Square of PQ (D) None of them

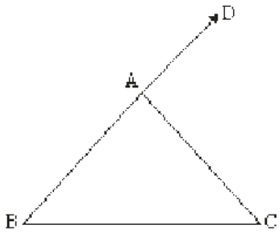
21.Which is the largest side of a right angle triangle?
(A) Median (B) Hypotenuse (C) Arm (D) Altitude

22.Is the triangle possible, if sides of the triangle are 5 cm,12cm and 6cm?

23.Is the triangle possible if angles of the triangle are $\overline{30°}$, $\overline{60°}$, $\overline{80°}$?

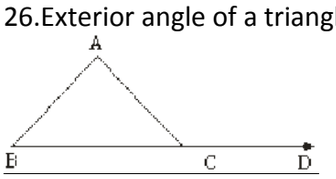
24. ΔABC is right-angled at C. If AC = 5 cm and BC = 12 cm find the length of AB.

25.Find $\angle$ ACD, if $\angle$ ABC = 30^o and $\angle$ CAD = 80^o.



(A) 70^o (B) 50^o (C) 30^o (D) 100^o

26.Exterior angle of a triangle is equal to the sum of its _____ opposite angles.

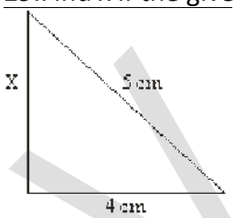


(A) interior (B) adjacent (C) vertically (D) alternate

27.Can the exterior angle of a triangle be a straight angle?
(A) Yes (B) No (C) May be (D) None of them

28.What is the value of the perimeter of a triangle whose sides are 10cm, 30cm and 50cm?
(A) 60 cm (B) 70 cm (C) 80 cm (D) 90 cm

29.Find x if the given figure is right angle triangle.



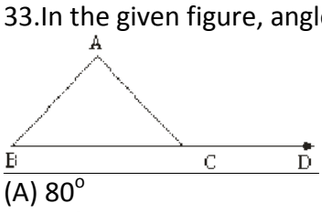
(A) 3 cm (B) 4 cm (C) 5 cm (D) 6 cm

30.If all sides of a parallelogramare equal and diagonals bisect each other at right angles what will be the figure?

31.A _____ connects a vertex of a triangle to the mid point of opposite sides.
(A) side (B) angle (C) vertex (D) median

32.How many medians can a triangle have?
(A) 4 (B) 2 (C) 3 (D) 1

33.In the given figure, angle A= 60^o, angle ACD = 120^o. Find angle ABC .



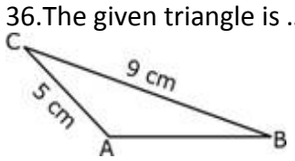
(A) 80^o
(B) 80^o

(C) 65^o
(D) 60^o

34.Diagonals of a Rhombus intersect each other at an angle of _____

35.The three angles of a triangle are in the ratio 1:2:3. Find the least angle of the given triangle.
(A) 30^o (B) 60^o (C) 45^o (D) 90^o

36.The given triangle is …… if CA = AB

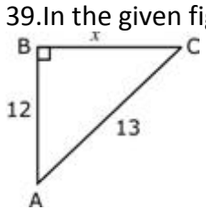


(A) Right-triangled (B) Isosceles triangle (C) Both (a) and (b) (D) None of them

37.Two angles of a triangle are 30^0 and 70^0. The third angle is ……?
(A) 90^0 (B) 100^0 (C) 70^0 (D) 80^0

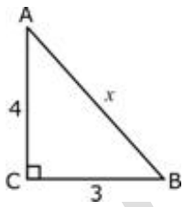
38.Find the perimeter of the reactangle whose length is 24 cm and a diagonal is 25 cm.
(A) 60 cm (B) 69 cm (C) 62 cm (D) 56 cm

39.In the given figure the value of x is ….



(A) 4 (B) 5 (C) 3 (D) 6

40.In the given figure the value of x is ….

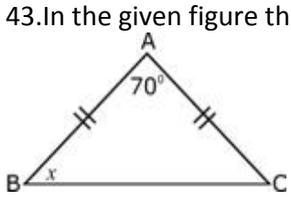


(A) 5 (B) 2 (C) 6 (D) 7

41.In an isosceles triangle base angles opposite to the equal sides are….
(A) equal (B) complementary (C) supplementary (D) None of them

42.Pythagoras property holds in …….
(A) Isosceles triangle (B) Right triangle (C) Equilateral triangle (D) Scalene triangle

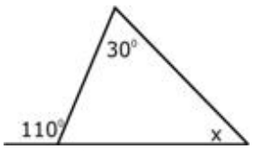
43.In the given figure the value of x is …



(A) 45^0 (B) 35^0 (C) 55^0 (D) 65^0

44.In an equilateral triangle has each angle measure ……
(A) 45^o (B) 60^o (C) 45^o (D) None of them

45.Find the measure angle x in given figure:

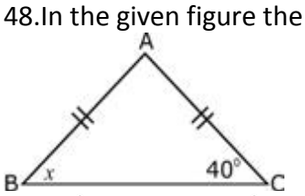


(A) 70^o (B) 80^o (C) 60^o (D) 90^o

46.How many altitudes can a triangle have?
(A) 1 (B) 2 (C) 3 (D) 4

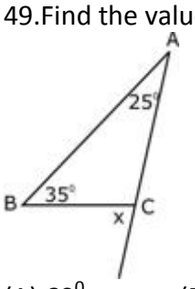
47.Which is the longest side in the triangle PQR, right-angled at P?
(A) PQ (B) PR (C) RQ (D) None of them

48.In the given figure the value of x is …….



(A) 50^o (B) 40^o (C) 60^o (D) 30^o

49.Find the value of x in the given figure



(A) 60^0 (B) 70^0 (C) 50^0 (D) 80^0

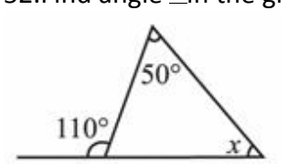
50.The length of two sides of a triangle are 10 cm and 13 cm. the possible lenght of the third side is.
(A) Between 3 and 27 (B) Between 3 and 26 (C) Between 3 and 23 (D) Between 3 and 25

<2M>
51.Match the following from the code given below :

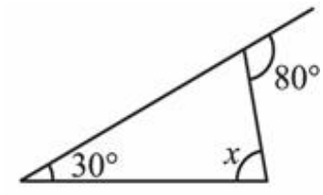
Column A	Column B
A. Isosceles triangle	(i) A triangle whose all 3 sides are equal
B. Equilateral triangle	(ii) A triangle in which all the sides are unequal
C. Scalene triangle	(iii) A triangle in which one of the angle is of 90^o
D .Right angled triangle	(iv) A triangle in which 2 sides are equal

(A) A(i),B(ii),C(iii),D(iv) (B) A(ii),B(iii),C(i),D(iv)
(C) A(iv),B(i),C(ii),D(iii) (D) None of them

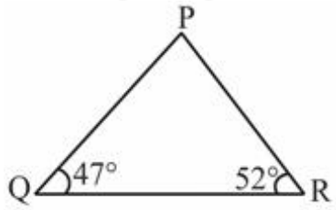
52.Find angle $\underline{\angle}$in the given figure.



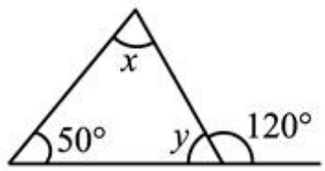
53.Find angle $\angle$in the following figure.



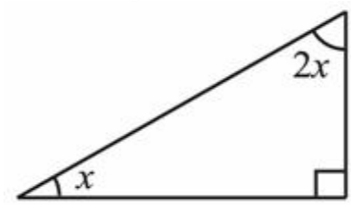
54.In the given figure, find m $\angle$ P.



55.Find angles x and y in the following figure.



56.Find angle x in the following figure.



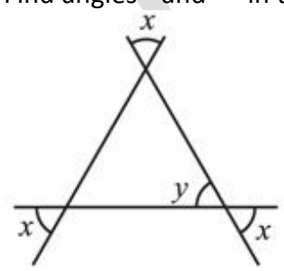
<3M>

57.AM is a medium of a triangle ABC, is AB + BC + CA > 2M

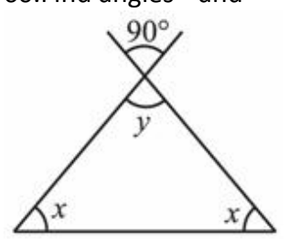
58.The lengths of two sides of a triangle are 6 cm and 8 cm. Between which two numbers can length of the third side fall?

59.

Find angles x and y in the following figure.

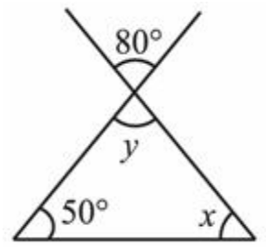


60.Find angles x and y in the followingfigure.



61.

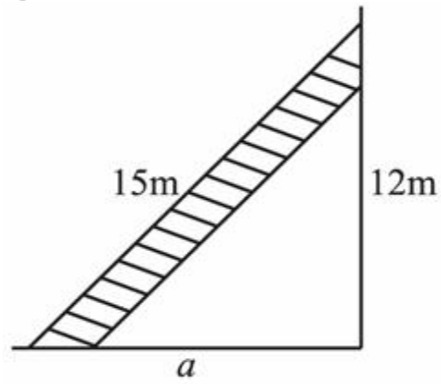
Find angles x and y in the following figure.



<5M>

62.A diagonals of a rhombus measure 24cm and 10 cm. Find its perimeter.

63.A 15 m long ladder reached a window 12 m high from the ground on placing it against a wall at a distance a. Find the distance of the foot of the ladder from the wall.

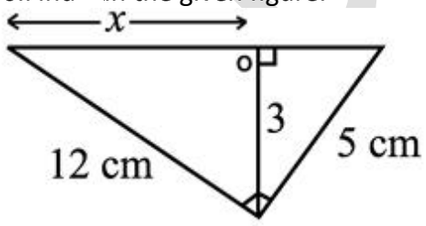


64.A tree is broken at a height of 5 m from the ground and is bent so that its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.

65.(a) Find the perimeter ofa rectangle whose length is 40 cm andone of the diagonal isof 41 cm.

(b) PQR is a triangle, right angled at P. If PQ = 10 cm and PR = 24 cm find QR.

66.Find x in the given figure.



67.ABCD is a quadrilateral. Is AB +BC+CD+DA > AC+BD

68.ABCD is a quadrilateral. Is AB +BC+CD+DA <2(AC+BD)