

WORK SHEET
SUBJECT- MATHS**Chapter-6: The triangle and its properties****CLASS- VII****Q1.Fill in the blanks:**

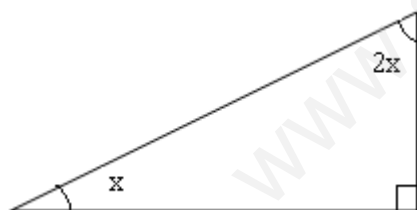
- a) A _____ of a triangle connects one of its vertex to the midpoint of the opposite side.
- b) A triangle can have _____ altitudes.
- c) A triangle can have _____ medians.
- d) In a _____ triangle two of its sides are its altitudes.
- e) In an _____ triangle, the median and altitude are given by the same line segment.
- f) _____ is the longest side in a right triangle.
- g) By Pythagoras theorem $(\quad)^2 = (\quad)^2 + (\quad)^2$

Q2. State:

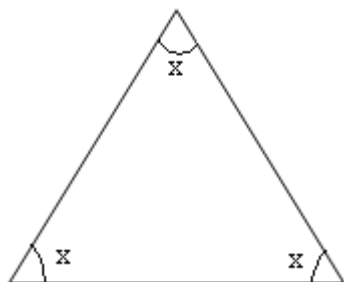
- a) Angle sum property of a triangle.
- b) Pythagoras property
- c) Property of the lengths of sides of a triangle.

Q3. Find the unknown angles of the following:

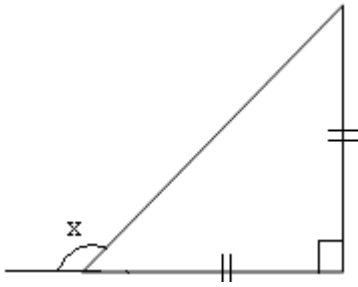
a)



b)



Q4. Find the value of x:



Q5. The lengths of two sides of a triangle are 12cm and 15cm. Between what two measures should the length of the third side fall?

Q6. ABCD is a quadrilateral. Is $AB + BC + CD + DA < 2(AC + BD)$?

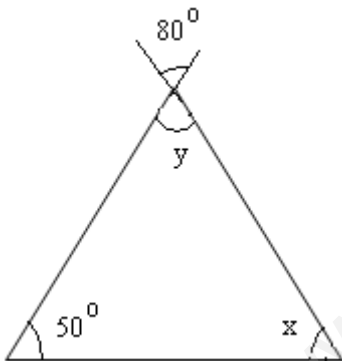
Q7. Determine whether the triangle whose lengths of sides are 4, 5, 6 is a right angled triangle.

Q8. $\triangle ABC$ is right angled at C. If $AC=5\text{cm}$ and $BC=12\text{cm}$, find the length of AB.

Q9. Is there a triangle whose sides have length 10.2cm, 5.8cm and 4.5cm?

Q10 Find the values of the unknowns x and y in the following figures

a)



b)

