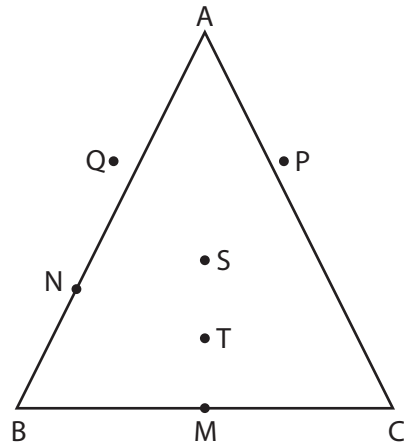


Worksheet

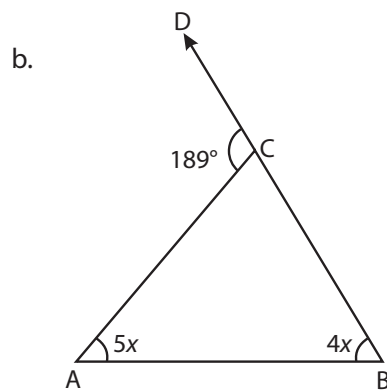
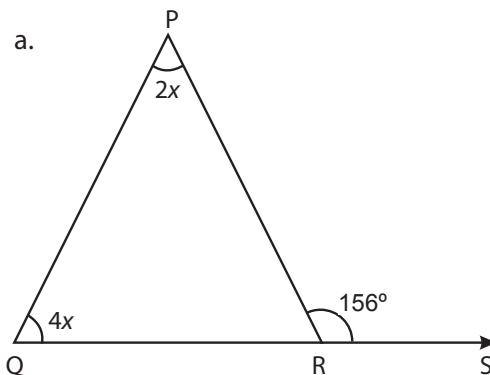
- Fill in the blanks.
 - A closed figure formed by joining three non-collinear points is called a _____.
 - Points which lie outside the triangle are said to be in the _____ region.
 - A triangle with three unequal sides is called a _____.
 - The sum of the angles of a triangle is _____.

- Look at the figure given and answer accordingly:

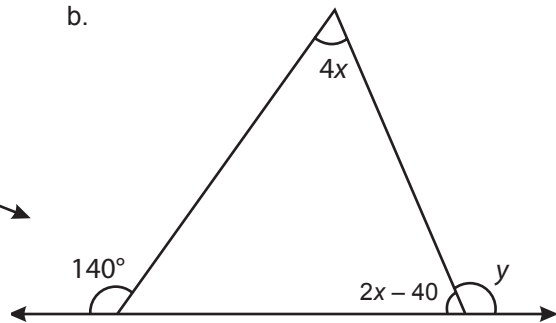
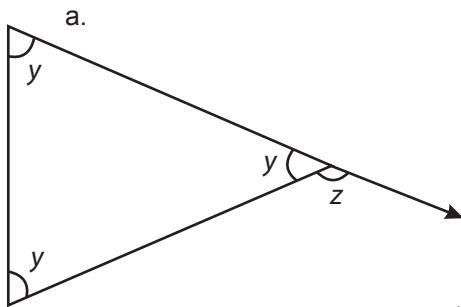
- Name the points lying in the exterior of $\triangle ABC$.
- Name the points lying in the interior of $\triangle ABC$.
- Name the points lying on the boundary of $\triangle ABC$.



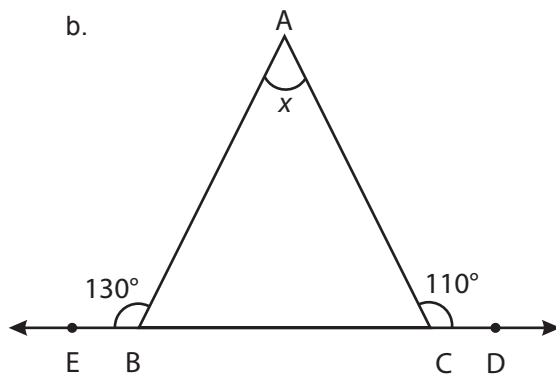
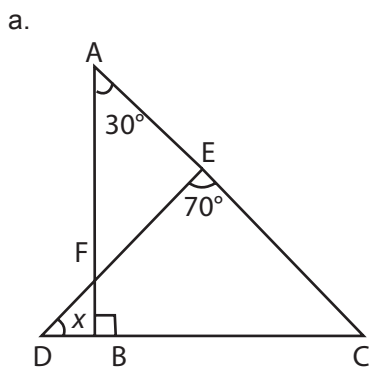
- The angles of a triangle are in the ratio $2 : 3 : 4$. Find the measure of each angle of the triangle.
- Can 4 cm, 6 cm and 5 cm represent the sides of a triangle?
- Calculate the value of x in each of the given figures.



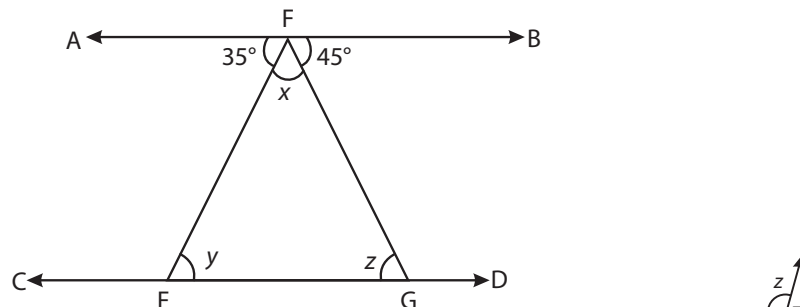
6. Find the value of the unknown letters.



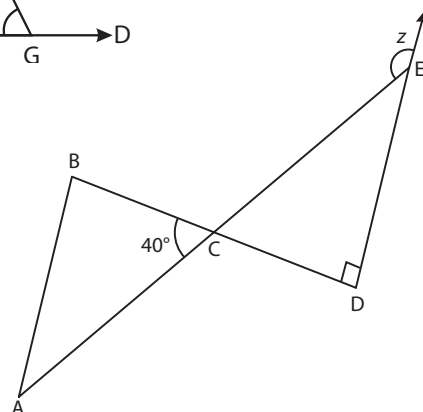
7. Of the three angles of a triangle, one is three times the smallest angle and the other is five times the smallest angle. Find the angles.
8. Find the value of x in each of the given figures.



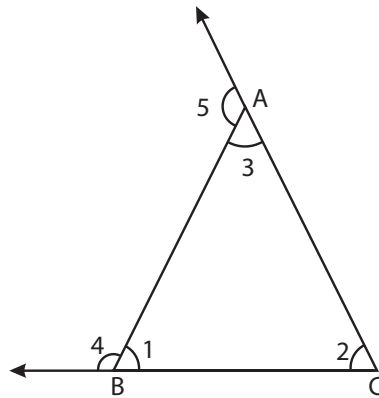
9. In the given figure, find the measure of x , y and z .



10. From the following figure, find the value of z .



11. In the angles of a triangle, one is nine times the smallest angle and the third angle is 90° . Find the unknown angles.
12. From the following figure, name the interior and exterior angles.



Answers to Worksheet

1. a. triangle b. exterior c. scalene triangle d. 180°
2. a. P, Q b. S, T c. M, N
3. $40^\circ, 60^\circ, 80^\circ$ 4. yes
5. a. 26 b. 21
6. a. $y = 60^\circ, z = 120^\circ$ b. $x = 30^\circ, y = 160^\circ$
7. $20^\circ, 60^\circ, 100^\circ$
8. a. $x = 50^\circ$ b. $x = 60^\circ$
9. $x = 100^\circ, y = 35^\circ, z = 45^\circ$
10. $z = 130^\circ$
11. $9^\circ, 81^\circ$
12. Interior angles: $\angle 1, \angle 2, \angle 3$
Exterior angles: $\angle 4, \angle 5$