

SUBJECT: MATHEMATICS STD-VI
TOPIC- TRIANGLES
ASSIGNMENT (STANDARD)

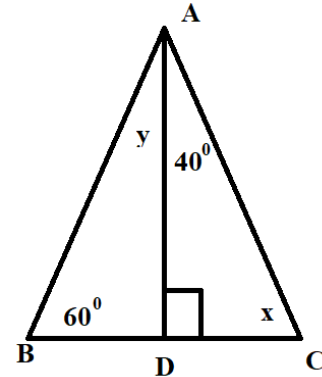
Mark the correct alternative in each of the following questions

1. In an equilateral triangle each side is 12 cm then the perimeter is _____
 - (i) 12 cm
 - (ii) 24cm
 - (iii) 36cm
 - (iv) 48cm
2. A triangle has at most _____ obtuse angles.
 - (i) 1
 - (ii) 2
 - (iii) 3
 - (iv) 4
3. A triangle divides the plane in _____ parts.
 - (i) 1
 - (ii) 2
 - (iii) 3
 - (iv) 4

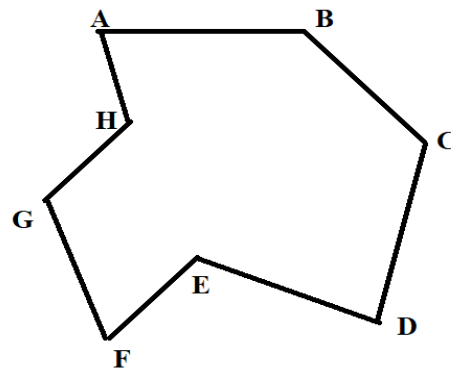
Answer the following questions

4. Define triangular region. (with figure)
5. Define exterior angle of a triangle.
6. Show interior adjacent angles corresponding to exterior angle of a triangle with figure.
7. Show interior opposite angles corresponding to exterior angle of a triangle with figure.
8. Two equal angles of a triangle are of each 50° . Find the third angle.
9. Classify the triangle into acute triangle, obtuse triangle and right triangle with the following angles:
 - (i) $80^\circ, 60^\circ, 40^\circ$
 - (ii) $130^\circ, 40^\circ, 10^\circ$
10. Classify the triangle according to sides, that is, equilateral, isosceles and scalene triangles:
 - (i) 12 cm, 10 cm, 5cm.
 - (ii) 6 cm, 10 cm, 6 cm.
11. Is it possible to draw a triangle by taking the measurements 12cm, 10cm, 22cm as sides? Justify your answer.
12. Draw a triangle by taking A, B and C non-collinear points on a plane and answer the following questions.
 - (i) Vertex opposite to side BC
 - (ii) Angle opposite to vertex C
13. In an isosceles triangle if the non-equal angle is 45° , then calculate the equal angles.

14. Each side of a Δ is one third of its perimeter. What kind of triangle is this?
15. One of the two equal angles of an isosceles triangle measures 55° . Determine the other angles.
16. The acute angles of a right angled triangle are in the ratio 8:7, then calculate the acute angles.
17. In a triangle one angle is one-third of the greatest angle and another angle is two-fifth of the greatest angle. Calculate the angles.
18. From the following figure calculate x and y



19. Find the sum of the interior angles of the given polygon by dividing it into triangles.



20. In the figure calculate x

