ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra and Geometry Work sheet8 answer key

Marks:15TRIANGLES

Date:20.2.2021

Answer all thefollowing questions(1×15=15)

1. A triangle formed by the sides of lengths 4.5 cm, 6 cm, and 4.5 cm is
   (a) scalene
   (b) isosceles
   (c) equilateral
   (d) none of these

Solution:

A triangle formed by the sides of lengths 4.5 cm, 6 cm, and 4.5 cm is isosceles. (b)

2. The number of medians in a triangle is
   (a) 1
   (b) 2
   (c) 3
   (d) 4

Solution:

The number of medians in a triangle is 3. (c)

3. An exterior angle of a triangle is 125°. If one of the two interior opposite angles is 55° then the other interior opposite angle is
   (a) 70°
   (b) 55°
   (c) 60°
   (d) 80°

Solution:

An exterior angle of a triangle is 125°.
If one of the two interior opposite angles is 55°
then the other interior opposite angle is 125° − 55° = 70° (a)

4. In a ΔABC, if ∠A = 40° and ∠B = 55° then ∠C is
   (a) 75°
   (b) 80°
   (c) 95°
   (d) 85°

Solution:

In a ΔABC, if ∠A = 40° and ∠B = 55°
then ∠C is 180° − (40° + 55°) = 180° − 95° = 85° (d)

5. If the angles of a triangle are 35°, 35°, and 110°, then it is
   (a) an isosceles triangle
   (b) an equilateral triangle
   (c) a scalene triangle
   (d) right-angled triangle

   Solution:

   If the angles of a triangle are 35°, 35°, and 110°,
   then it is an isosceles triangle. (a)

6. A triangle whose two angles measure 30° and 120° is
   (a) scale
   (b) isosceles
   (c) equilateral
   (d) none of these

Solution:

A triangle whose two angles measure
30° and 120° is an isosceles triangle. (b)

7. A triangle can have two
   (a) right angles
   (b) obtuse angles
   (c) acute angles
   (d) straight angles

   Solution:

   A triangle can have two acute angles. (c)

8. A triangle is not possible whose angles measure
   (a) 40°, 65°, 75°
   (b) 50°, 56°, 74°
   (c) 72°, 63°, 45°
   (d) 67°, 42°, 81°

   Solution:

   A triangle is not possible whose angles measure 67°, 42°, 81°. (d)
   (Sum is more than 180°)

9. If in an isosceles triangle, each of the base angles is 40°, then the triangle is
   (a) right-angled triangle
   (b) acute-angled triangle
   (c) obtuse-angled triangle
   (d) isosceles right-angled triangle

   Solution:

   If in an isosceles triangle, each of the base angles is 40°,
   then the triangle is an obtuse angled triangle. (c)

10. A triangle cannot have more than …… right angle.
    (a)1
    (b)2
    (c)3
    (d)4

    Solution: a)1

11. A triangle cannot have more than …… obtuse angle.
    (a) 2

(b)1
(c)3
(d)4

Solution: b) 1

12. In every triangle, the sum of (interior) angles of a triangle = …….. right angles.

(a) 3
(b) 2
(c)1
(d) 5

Solution: b) 2

13.In every triangle, an exterior angle + adjacent interior angle = …… degrees.

(a) 90
(b) 180
(c)60
(d) 360

Solution: b) 180

14.In every triangle, an exterior angle = sum of the …….. interior opposite angles.

(a) 3
(b) 1
(c)2
(d) none of these

Solution: c) 2

15.In a right-angled triangle, if one of the acute angles measures 25° then the measure of the other acute angle is ……

(a) 65°
(b) 55°
(c)75°
(d) 85°

Solution: a) 65° ,x+25+90=180

IndranilGhosh