

Properties of Triangle Worksheet – 2

1. All the three angles of a triangle can be more than 60° . Mark True / False.

- a) True b) False

2. Any three-line segment can make up a triangle. Mark True / False.

- a) True b) False

3. An isosceles triangle can be a right-angled triangle. Mark True / False.

- a) True b) False

4. An equilateral triangle can be an isosceles triangle. Mark True / False.

- a) True b) False

5. Every right-angled triangle is scalene. Mark True / False.

- a) True b) False

6. In a right-angled triangle, the sum of two acute angles is equal to 90° . Mark True / False.

- a) True b) False

7. Each acute angle of an equilateral triangle is equal to 60° . Mark True / False.

- a) True b) False

8. A median of a triangle always lies inside the triangle. Mark True / False.

- a) True b) False

9. A triangle can be formed having all three sides as 4 cm, 5 cm and 10 cm. Mark True / False.

- a) True b) False

10. An altitude of a triangle always lies outside of the triangle. Mark True / False.

- a) True b) False

11. A triangle whose two angles are 45° and 90° , then it is known as _____.

- a) Scalene b) Equilateral
c) Acute d) Isosceles

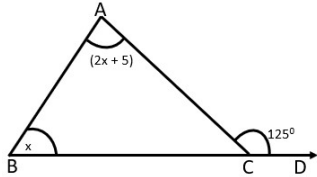
12. In a right-angled triangle, if one of the acute angle measures is 35° then the measure of other acute angle is _____.

- a) 35° b) 45°
c) 55° d) 65°

13. A triangle is not possible whose angles measure

- | | |
|------------------------------------|------------------------------------|
| a) $45^\circ, 45^\circ, 90^\circ$ | b) $30^\circ, 70^\circ, 65^\circ$ |
| c) $47^\circ, 33^\circ, 100^\circ$ | d) $125^\circ, 35^\circ, 20^\circ$ |

14. Find the value of 'x' in the below given figure.

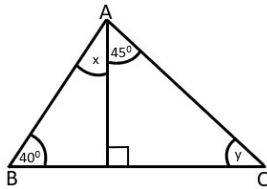


- | | |
|---------------|---------------|
| a) 45° | b) 55° |
| c) 40° | d) 65° |

15. If the angles of a triangle are in the ratio 3 : 4 : 5, then find the largest angle.

- | | |
|---------------|---------------|
| a) 45° | b) 55° |
| c) 60° | d) 75° |

16. Find the value of 'x' and 'y' in the below given figure.



- | | |
|---------------------------------|---------------------------------|
| a) $x = 45^\circ, y = 45^\circ$ | b) $x = 50^\circ, y = 50^\circ$ |
| c) $x = 50^\circ, y = 45^\circ$ | d) None of these |

17. Each of the two equal angles of a triangle is twice the third angle. Find the angles.

- | | |
|-----------------------------------|-----------------------------------|
| a) $50^\circ, 70^\circ, 70^\circ$ | b) $45^\circ, 90^\circ, 90^\circ$ |
| c) $36^\circ, 72^\circ, 72^\circ$ | d) $35^\circ, 70^\circ, 70^\circ$ |

18. One of the acute angles of a right-angled triangle is 48° . Find the other acute angle.

- | | |
|---------------|---------------|
| a) 42° | b) 24° |
| c) 65° | d) 72° |

19. The sides of certain triangles are given below. Determine which option can form a right-angled triangle.

- | | |
|----------------------|----------------------|
| a) 5 cm, 7 cm, 13 cm | b) 6 cm, 8 cm, 10 cm |
| c) 4 cm, 5 cm, 10 cm | d) 4 cm, 4 cm, 4 cm |

20. In a triangle ABC, if $\angle A + \angle B = 150^\circ$ and $\angle B + \angle C = 80^\circ$, then find the smallest angle.

a) 50°

b) 80°

c) 30°

d) 100°