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Class: 7
Subject: Mathematics
Topic: Practical Geometry
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

1. The total measure of the three angles of a triangle is _____.
   A. 80◦
   B. 90◦
   C. 180◦
   D. None of these

Ans. C(Fact)

2. Sum of the lengths of any two sides of a triangle is greater than the length of the ____.
   A. third side
   B. second side
   C. first side
   D. None of these

Ans. A (Fact)

3. _----------__ of the lengths of any two sides of a triangle is greater than the length of the third side.
   A. Difference
   B. None of these
   C. Product
   D. Sum

Ans. D (Fact)

4. In any right-angled triangle, the square of the length of _____ is equal to the sum of the squares of the lengths of the other two sides.
   A. altitude
   B. None of these

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C. base
D. hypotenuse

Ans. D (Pythagoras Theorem)

5. A/an _---------- connect a vertex of a triangle to the mid-point of the opposite side.
   A. vertex
   B. median
   C. altitude
   D. None of these

Ans. B (Fact)

6. A triangle in which two sides are of equal lengths is called _____.
   A. scalene
   B. acute-angled
   C. isosceles
   D. equilateral

Ans. C(FACT)

7. Δ ABC is right-angled at C. If AC = 5 cm and BC = 12 cm find the length of AB.
   A. 7 cm
   B. None of these
   C. 13 cm
   D. 17 cm

Ans. C (13, 12, & 5 are Pythagoras triplet, i.e. they satisfy Pythagoras theorem)

8. Which is the longest side in the triangle PQR right angled at P?
   A. PQ
   B. None of these
   C. PR
   D. QR

Ans. D (Side opposite to right angle is longest side of a right angled triangle)

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9. A triangle can be drawn if ---------- sides given.
   A. 2
   B. 3
   C. None of these
   D. 1

Ans. B(fact)

10. A triangle can be drawn if two angles and _---------_____ side given.
   A. 2
   B. 1
   C. None of these
   D. 3

Ans. B (Both the angles must be on the know side, then the triangle can be drawn)

11. A triangle can be drawn if ---------- angles and one side given.
   A. None of these
   B. 3
   C. 2
   D. 4

Ans. C (Both the angles must be on the know side, then the triangle can be drawn)

12. A triangle can be drawn if the hypotenuse and a _____ IS KNOWN in the case of a right-angled triangle.
   A. base
   B. None of these
   C. hypotenuse
   D. leg

Ans. D fact)

13. Write the angle opposite to the side LM of Δ LMN.
   A. $\angle M$
   B. None of these

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C. ∠N

D. ∠L

Ans. C (Draw the triangle and label it, you will see)

14. A triangle in which all the three sides are of equal lengths is called an _____.

A. Isosceles
B. None of these
C. equilateral
D. Scalene

Ans. C(fact)

15. In an equilateral triangle each angle has measure _____.

A. 140∘
B. 100∘
C. 120∘
D. 60∘

Ans. D (All the angles of an equilateral triangle are equal and their sum is 180, so 3x = 180 or x = 60)

16. Two angles of a triangle are 30∘ and 80∘. Find the third angle.

A. 70∘
B. 50∘
C. 60∘
D. None of these

Ans. A (Sum of all the angles has to be 180, so x + 30 + 80 = 180 or x = 70)

17. In an isosceles triangle ---------- sides have same length.

A. None of these
B. 4
C. 3
D. 2

Ans. D(fact)

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18. One of the angles of a triangle is 80◦ and the other two angles are equal. Find the measure of each of the equal angles.

A. 80◦
B. 50◦
C. 60◦
D. 70◦

Ans. B (x + x + 80 = 180 or x = 50)

19. How many acute angles can a right triangle have?

A. 2
B. 1
C. 3
D. 0

Ans. A (Since one angle is 90 so another two's sum is also 90 i.e. both of them is <90 or both are acute angled)

20. How many obtuse angles can a right triangle have?

A. 1
B. 3
C. 2
D. 0

Ans. D (Since one angle is 90 so another two's sum is also 90 i.e. both of them is <90 or both are acute angled)