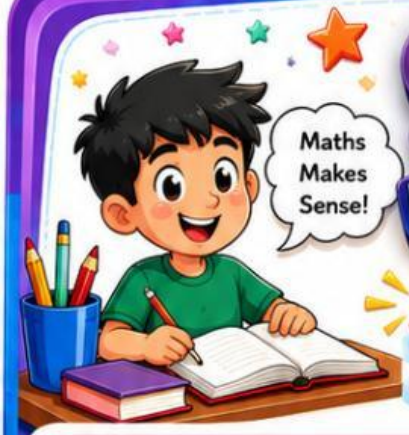
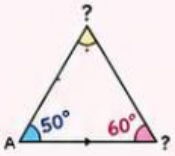


SIMILAR TRIANGLES

CLASS 10 – MULTIPLE CHOICE QUESTIONS

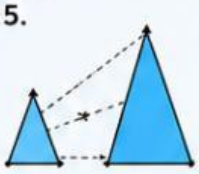
1 If two angles of a triangle are 50° and 60°, the third angle is:

- (A) 60°
- (B) 70°
- (C) 80°
- (D) 90°



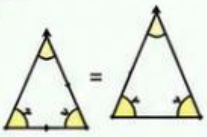
2 In two similar triangles, the ratio of their corresponding sides is 3:5. The ratio of their areas is:

- (A) 3:5
- (B) 6:10
- (C) 9:25
- (D) 15:25



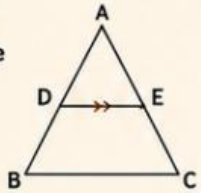
3 Which criterion is used to prove two triangles are similar when two angles are equal?

- (A) SSS
- (B) SAS
- (C) AA
- (D) RHS



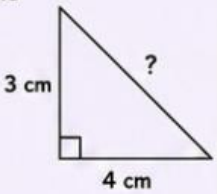
4 If a line is drawn parallel to one side of a triangle to intersect the other two sides, then it divides those sides:

- (A) Equally
- (B) Proportionally
- (C) Perpendicularly
- (D) Randomly



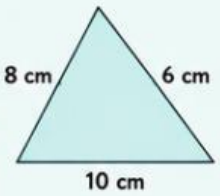
5 In a right-angled triangle, if the sides are 3 cm and 4 cm, the hypotenuse is:

- (A) 5 cm
- (B) 6 cm
- (C) 7 cm
- (D) 8 cm



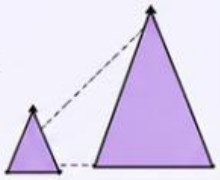
6 The sides of a triangle are 6 cm, 8 cm, and 10 cm. The triangle is:

- (A) Acute-angled
- (B) Obtuse-angled
- (C) Right-angled
- (D) Equilateral



7 If the areas of two similar triangles are in the ratio 16:25, then the ratio of their corresponding sides is:

- (A) 16:25
- (B) 4:5
- (C) 8:10
- (D) 2:5

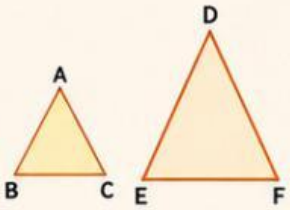


8 A triangle with all sides equal is called:

- (A) Isosceles triangle
- (B) Scalene triangle
- (C) Right triangle
- (D) Equilateral triangle

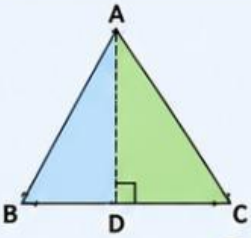
9 If $\Delta ABC \sim \Delta DEF$ and $AB = 6$ cm, $DE = 9$ cm, $BC = 8$ cm, then EF is:

- (A) 10 cm
- (B) 12 cm
- (C) 14 cm
- (D) 16 cm



10 The ratio of the areas of two triangles having equal heights is equal to the ratio of their:

- (A) Angles
- (B) Perimeters
- (C) Bases
- (D) Diagonals



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