

## CHAPTER-6 | Perimeter and Area

QUIZ  
PART-10

1. What is the formula for the area of a triangle?

- A. base  $\times$  height  
B.  $\frac{1}{2} \times$  base  $\times$  height  
C. base + height  
D.  $2 \times$  base  $\times$  height (B)

**Explanation:** The area of a triangle is half the product of its base and height.

2. A triangle has base 10 cm and height 6 cm. Its area is:

- A.  $60 \text{ cm}^2$   
B.  $30 \text{ cm}^2$   
C.  $16 \text{ cm}^2$   
D.  $20 \text{ cm}^2$  (B)

**Explanation:** Area =  $\frac{1}{2} \times 10 \times 6 = 30 \text{ cm}^2$ .

3. A triangle has base 6 m and height 4 m. Its area is:

- A.  $10 \text{ m}^2$   
B.  $12 \text{ m}^2$   
C.  $24 \text{ m}^2$   
D.  $48 \text{ m}^2$  (B)

**Explanation:** Area =  $\frac{1}{2} \times 6 \times 4 = 12 \text{ m}^2$ .

4. If base = 8 m and height = 10 m, then area =

- A.  $80 \text{ m}^2$   
B.  $18 \text{ m}^2$   
C.  $40 \text{ m}^2$   
D.  $20 \text{ m}^2$  (C)

**Explanation:** Area =  $\frac{1}{2} \times 8 \times 10 = 40 \text{ m}^2$ .

5. The area of a triangle is always measured in:

- A. cm  
B. m  
C. square units  
D. line units (C)

**Explanation:** Area shows the surface covered, so it is written in square units like  $\text{cm}^2$  or  $\text{m}^2$ .

6. If base = 12 cm and height = 5 cm, the area is:

- A.  $17 \text{ cm}^2$   
B.  $30 \text{ cm}^2$   
C.  $60 \text{ cm}^2$   
D.  $24 \text{ cm}^2$  (B)

**Explanation:** Area =  $\frac{1}{2} \times 12 \times 5 = 30 \text{ cm}^2$ .

7. Which value is needed with the base to find the area of a triangle?

- A. perimeter  
B. side  
C. height  
D. angle (C)

**Explanation:** To find the area of a triangle, we need the base and its corresponding height.

8. If the product of base and height is 50, then the area of the triangle is:

- A. 50  
B. 100  
C. 25  
D. 75 (C)

**Explanation:** Area of a triangle is half of base  $\times$  height, so  $\frac{1}{2} \times 50 = 25$ .

9. In the assessment figure, base = 10 m and height = 6 m. The shaded triangle area is:

- A.  $60 \text{ m}^2$   
B.  $30 \text{ m}^2$   
C.  $60 \text{ m}$   
D.  $30 \text{ m}$  (B)

**Explanation:** Area =  $\frac{1}{2} \times 10 \times 6 = 30 \text{ m}^2$ . Also,  $\text{m}^2$  is correct because area is measured in square units.

10. Which one is incorrect for triangle area?

- A.  $\frac{1}{2} \times b \times h$   
B.  $(b \times h) \div 2$   
C.  $b + h$   
D. half of base  $\times$  height (C)

**Explanation:** Adding base and height does not give area. The correct rule is half of base multiplied by height.