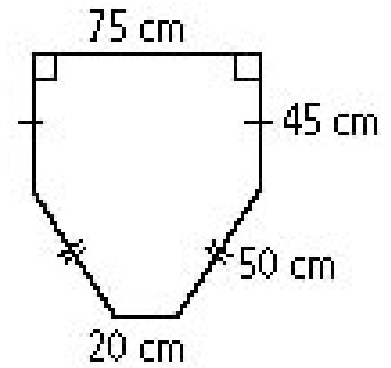Score: _____

1. Perimeter is the total distance around the outside of a 2D shape.

(A) **True**

(B) False

2. The height of a parallelogram is always at right angles to its base.

(A) **True**

(B) False

3. The base and height of a parallelogram always form a right angle.

(A) **True**

(B) False

4. The formula for the area of a triangle is A = b x h.

(A) True

(B) **False**

5. (8 + 12) / (4 - 2) + 5 x 6 = 33

(A) True

(B) **False**

6. In a calculation with several operations, you divide before multiply and then add before subtract.

(A) True

(B) **False**

7. The formula for area of a trapezoid is A = (a + b) x h / 2.

(A) **True**

(B) False

8. A 2D shape that can be split into 2 or more simpler shapes is known as a composite shape.

(A) **True**

(B) False

9. Calculate the perimeter.

A. 190 cm

B. 235 cm

C. **285 cm**

D. 315 cm

10. Diane has a hot tub that's in a hexagon shape. Each side is 1.5 m long. New padding will be put on the edge. Padding costs $5/m. What's the total cost of the padding?
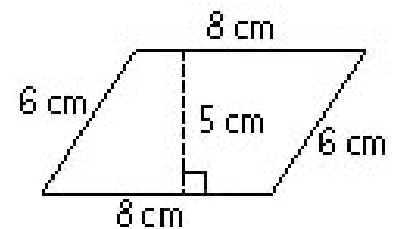
A. **$45**

B. $39

C. $40

D. $60

11. What is the formula area of a parallelogram?

A. **A = b x h**

B. A = b x h / 2

C. A = l x w

D. A = 2 x (l + w)

12. Calculate the area of this parallelogram.

A. 20 cm^2

B. 24 cm^2

C. **40 cm^2**

D. 48 cm^2

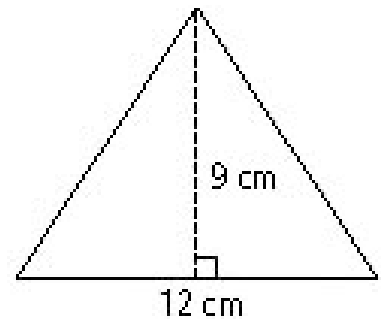**13.** Find the area of a parallelogram with a base of 5 cm, a height of 7 cm and a side length of 8 cm.

A. 20 cm^2

B. **35 cm^2**

C. 40 cm^2

D. 56 cm^2

14. Calculate the area of this isosceles triangle.

- (A) **54 cm²**
- (B) 72 cm²
- (C) 108 cm²
- (D) 144 cm²

9 cm

12 cm

15. Which operation do you perform first in the expression 7 + (5 - 3) x 4 /2?

- (A) addition
- (B) multiplication
- (C) division
- (D) **brackets**

16. Evaluate the expression (15 / 3) + 7 x 2 - 9.
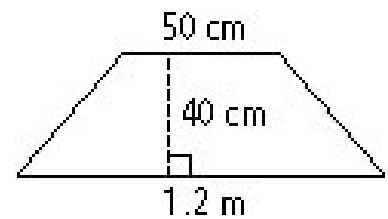
- (A) 12
- (B) **10**
- (C) 15
- (D) 16

17. A four-sided shape has only 1 pair of parallel sides. What is this shape?

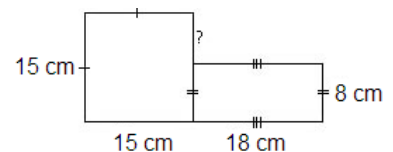- (A) parallelogram
- (B) rhombus
- (C) rectangle
- (D) **trapezoid**

18. Calculate the area of this trapezoid.

- (A) 3400 cm³
- (B) **0.34 m²**
- (C) 6.8 cm²
- (D) 0.68 m²

50 cm

40 cm

1.2 m

19. Find the missing dimension of this composite shape.

- (A) 6 cm
- (B) **7 cm**
- (C) 8 cm
- (D) 9 cm

15 cm

?

8 cm

15 cm   18 cm

20. Find the area of this field.

- (A) 999 m^2
- (B) 1278 m^2
- (C) 1836 m^2
- (D) 1998 m^2

18 m   9 m

40 m