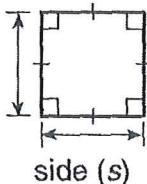
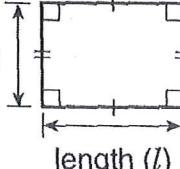
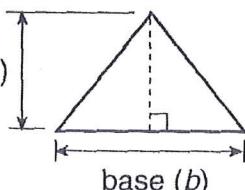
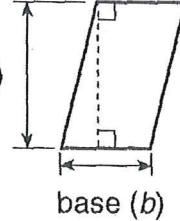
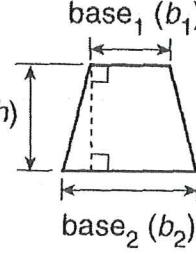
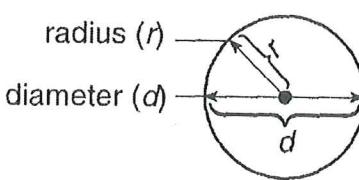


# Area - Review

Key

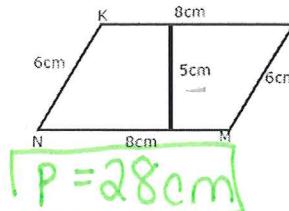
## Area

Area is the measure of the region inside a closed plane figure. Area is measured in square units. The table below shows formulas to find the area of different geometric shapes.

Name			Example
square	 side ( $s$ )	$A = s^2$	$s = 3 \text{ in.}$ $A = (3 \text{ in.}) \times (3 \text{ in.})$ $A = 9 \text{ in.}^2$
rectangle	 width ( $w$ ) length ( $l$ )	$A = lw$	$l = 10 \text{ cm}; w = 5 \text{ cm}$ $A = 10 \text{ cm} \times 5 \text{ cm}$ $A = 50 \text{ cm}^2$
triangle	 height ( $h$ ) base ( $b$ )	$A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$	$b = 4 \text{ m}; h = 3 \text{ m}$ $A = \frac{4 \text{ m} \times 3 \text{ m}}{2}$ $A = \frac{12}{2}$ $A = 6 \text{ m}^2$
parallelogram	 height ( $h$ ) base ( $b$ )	$A = bh$	$b = 8.5 \text{ yd}; h = 14 \text{ yd}$ $A = 8.5 \text{ yd} \times 14 \text{ yd}$ $A = 119 \text{ yd}^2$
trapezoid	 height ( $h$ ) base <sub>1</sub> ( $b_1$ ) base <sub>2</sub> ( $b_2$ )	$A = \frac{1}{2}h(b_1 + b_2)$ or $A = \frac{h(b_1 + b_2)}{2}$	$b_1 = 3 \text{ ft}; b_2 = 5 \text{ ft}; h = 4 \text{ ft}$ $A = \frac{4 \text{ ft} (3 \text{ ft} + 5 \text{ ft})}{2}$ $A = \frac{4 \text{ ft} (8 \text{ ft})}{2}$ $A = \frac{32}{2} = 16 \text{ ft}^2$
circle	 radius ( $r$ ) diameter ( $d$ ) $d = 2r$	$A = \pi r^2$	$r = 6 \text{ cm}; \pi \approx 3.14$ $A = 3.14 \times (6)^2$ $A = 3.14 \times 36 \text{ cm}^2$ $A = 113.04 \text{ cm}^2$

## Area and Perimeter of Triangles, Parallelograms and Trapezoids - Independent Practice Worksheet

1. Find the area and perimeter of parallelogram.



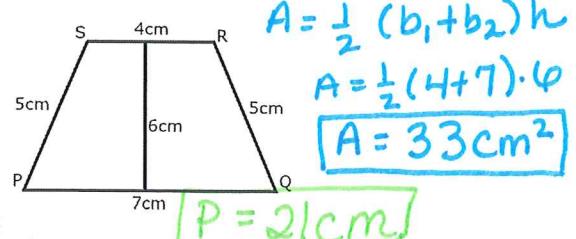
$$A = b \cdot h$$

$$A = 8 \cdot 5$$

$$\boxed{A = 40 \text{ cm}^2}$$

$$\boxed{P = 28 \text{ cm}}$$

2. Find the area and perimeter of the trapezoid.



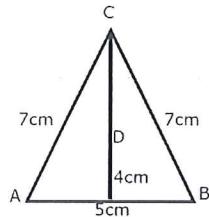
$$A = \frac{1}{2} (b_1 + b_2)h$$

$$A = \frac{1}{2} (4+7) \cdot 6$$

$$\boxed{A = 33 \text{ cm}^2}$$

$$\boxed{P = 21 \text{ cm}}$$

3. Find the area and perimeter of triangle.



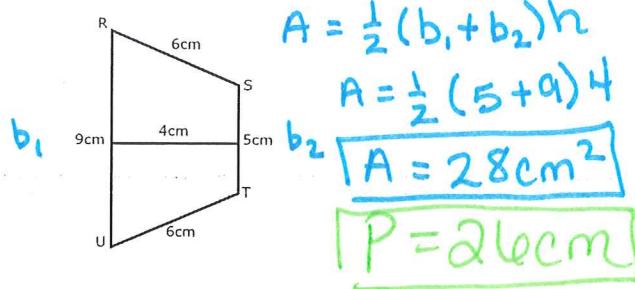
$$A = \frac{1}{2} b \cdot h$$

$$A = \frac{1}{2} 5 \cdot 4$$

$$\boxed{A = 20 \text{ cm}^2}$$

$$\boxed{P = 19 \text{ cm}}$$

5. Find the area and perimeter of the trapezoid.



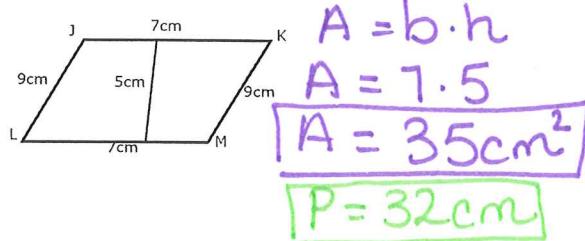
$$A = \frac{1}{2} (b_1 + b_2)h$$

$$A = \frac{1}{2} (5+9) 4$$

$$\boxed{A = 28 \text{ cm}^2}$$

$$\boxed{P = 26 \text{ cm}}$$

7. Find the area and perimeter of parallelogram.



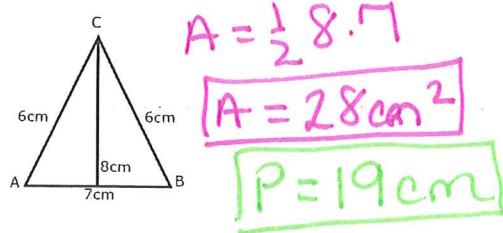
$$A = b \cdot h$$

$$A = 7 \cdot 5$$

$$\boxed{A = 35 \text{ cm}^2}$$

$$\boxed{P = 32 \text{ cm}}$$

9. Find the area and perimeter of triangle.

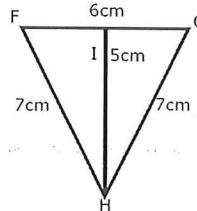


$$A = \frac{1}{2} b \cdot h$$

$$\boxed{A = 28 \text{ cm}^2}$$

$$\boxed{P = 19 \text{ cm}}$$

6. Find the area and perimeter of triangle.



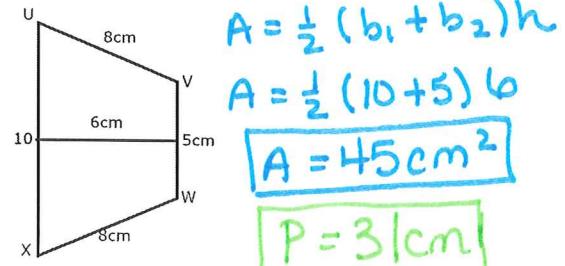
$$A = \frac{1}{2} b \cdot h$$

$$A = \frac{1}{2} 6 \cdot 5$$

$$\boxed{A = 15 \text{ cm}^2}$$

$$\boxed{P = 20 \text{ cm}}$$

8. Find the area and perimeter of the trapezoid.



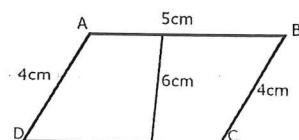
$$A = \frac{1}{2} (b_1 + b_2)h$$

$$A = \frac{1}{2} (10+8) 6$$

$$\boxed{A = 45 \text{ cm}^2}$$

$$\boxed{P = 31 \text{ cm}}$$

10. Find the area and perimeter of parallelogram.



$$\boxed{P = 18 \text{ cm}}$$

$$A = b \cdot h$$

$$\boxed{A = 30 \text{ cm}^2}$$