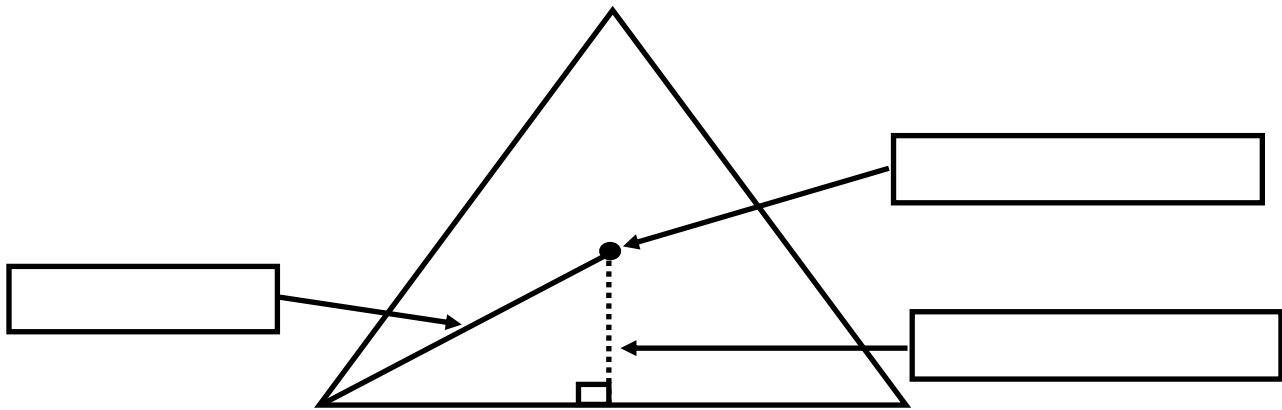


TOPIC 15-2: PERIMETER & AREA OF REGULAR POLYGONS

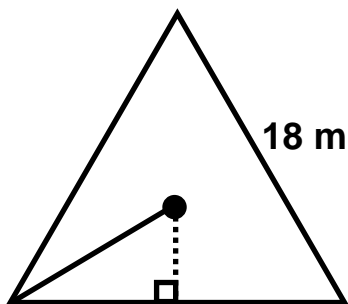


TERM	DEFINITION
Radius	
Apothem	

To find the area of a regular polygon:

$$A_{\text{Regular Polygon}} =$$

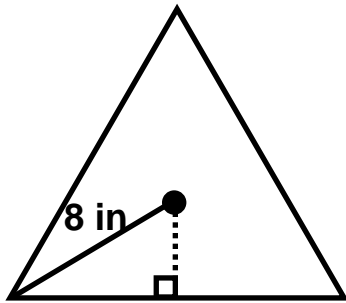
EXAMPLE 1: Find the perimeter and area of the equilateral triangle.



P = _____

A = _____

EXAMPLE 2: Find the perimeter and area of the regular triangle.



P = _____

A = _____

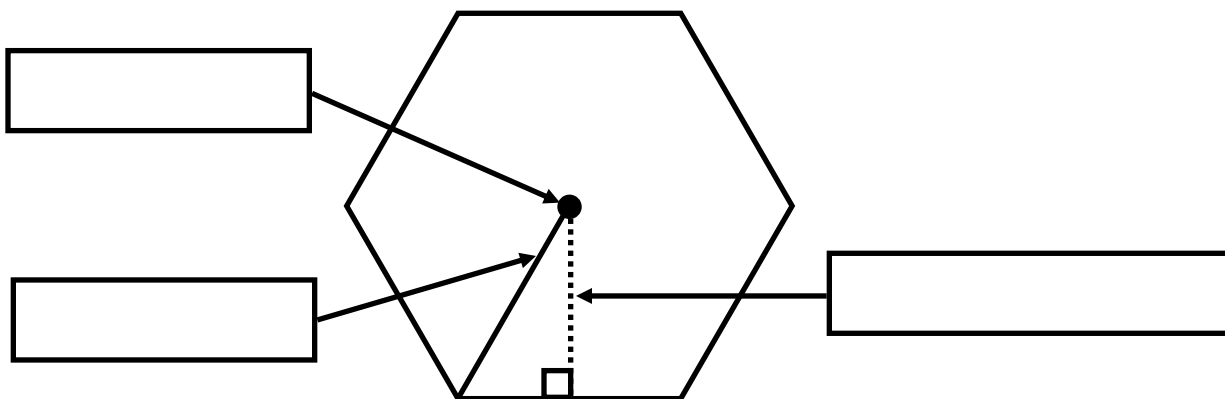
EXAMPLE 3: Find the area of an equilateral triangle that has a perimeter of $45\sqrt{3}$ cm.

A = _____

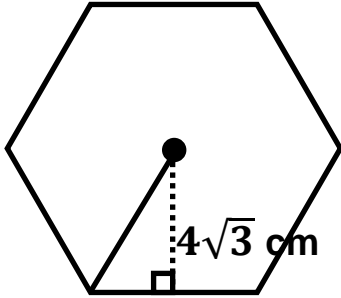
EXAMPLE 4: A regular triangle has an apothem with a length of 2 ft. Find its perimeter and area.

P = _____

A = _____



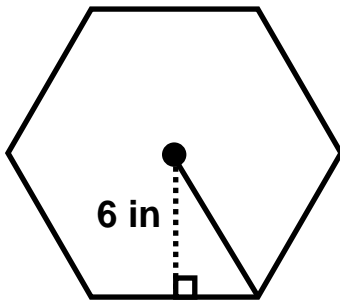
EXAMPLE 5: Find the perimeter and area of the regular polygon.



$$P = \underline{\hspace{2cm}}$$

$$A = \underline{\hspace{2cm}}$$

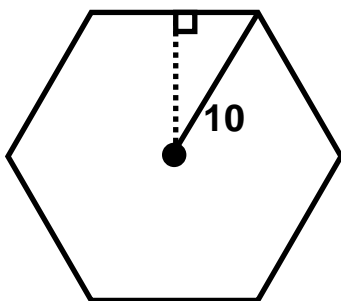
EXAMPLE 6: Find the perimeter and area of the regular hexagon below.



$$P = \underline{\hspace{2cm}}$$

$$A = \underline{\hspace{2cm}}$$

EXAMPLE 7: Find the perimeter and area of the regular polygon.



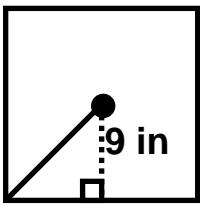
$$P = \underline{\hspace{2cm}}$$

$$A = \underline{\hspace{2cm}}$$

EXAMPLE 8: A regular hexagon has a perimeter of 78 cm. Find its area.

$$A = \underline{\hspace{2cm}}$$

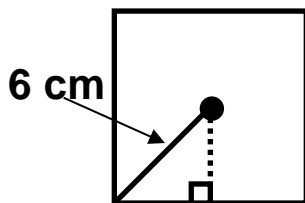
EXAMPLE 9: Find the perimeter and area of the regular polygon below.



$$P = \underline{\hspace{2cm}}$$

$$A = \underline{\hspace{2cm}}$$

EXAMPLE 10: Find the perimeter and area of the square below.



$$P = \underline{\hspace{2cm}}$$

$$A = \underline{\hspace{2cm}}$$