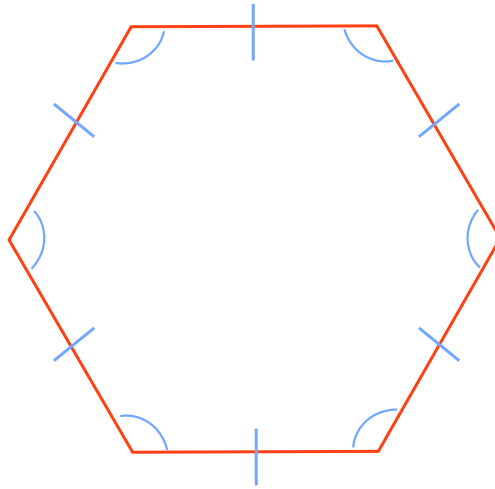


What is a **regular polygon**?
a **polygon** with congruent sides and congruent angles.

Regular Hexagon



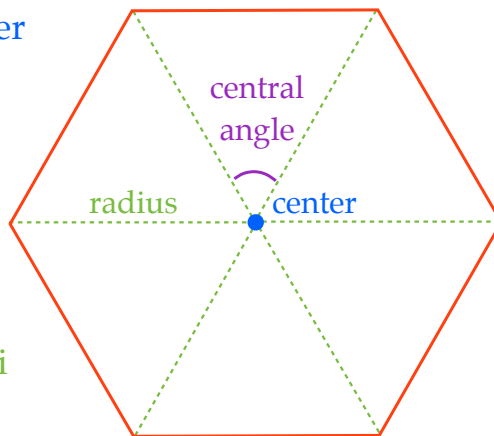
Pieces of a **regular polygon**?

Radius of a **polygon**

Segment from **center**
to **vertex** of the
polygon

Central Angle

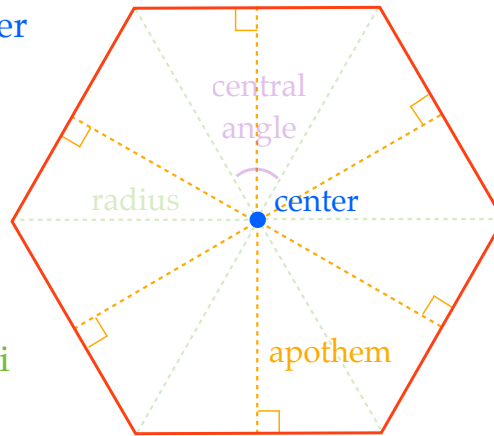
The **angle** between
two consecutive **radii**



Pieces of a **regular polygon**?

Radius of a **polygon**
Segment from **center**
to **vertex** of the
polygon

Central Angle
The **angle** between
two consecutive **radii**



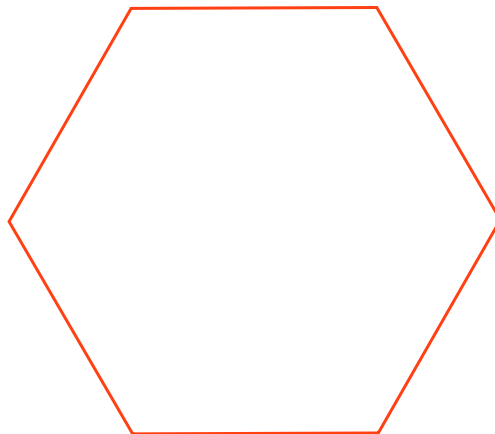
Apothem
The **perpendicular**
segment from the **center**
to a **side**

The **apothem** bisects the
side of the **polygon** and
the **central angle**

Area of a **Regular Polygon**
the **area** enclosed by the sides of the **polygon**.

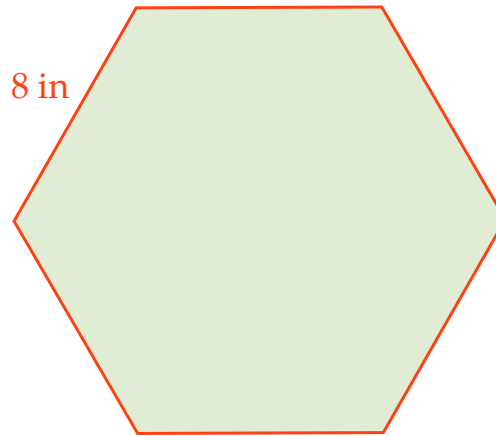
$$A = \frac{1}{2} P \cdot a$$

P = **perimeter** of **polygon**
 a = **apothem** of **polygon**



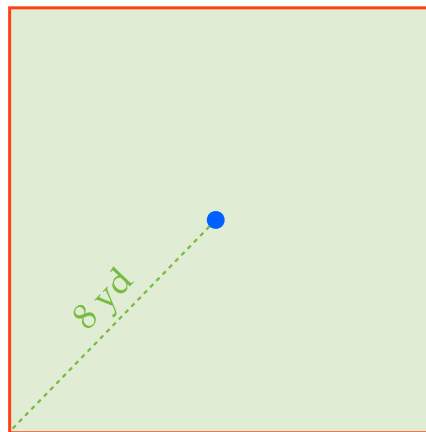
Find the **area** of the following **Regular Polygon**.

$$A = \frac{1}{2}P \cdot a$$



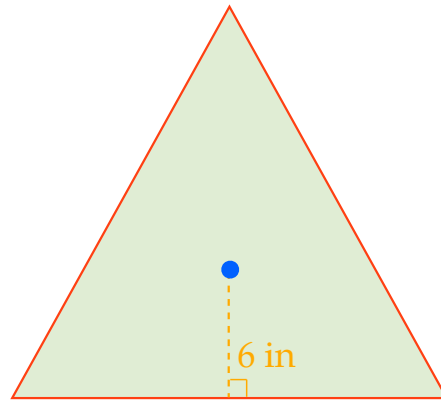
Find the **area** of the following **Regular Polygon**.

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Area of a Regular Polygon
the **area** enclosed by the sides of the **polygon**.

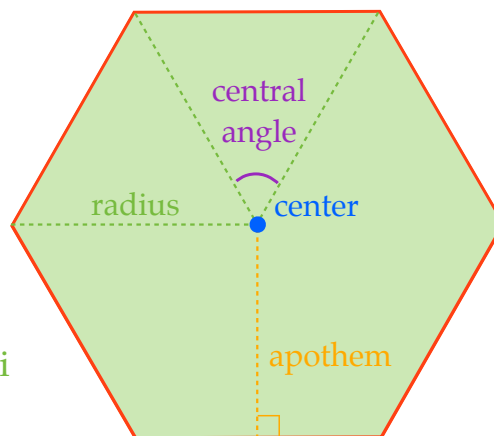
$$A = \frac{1}{2} P \cdot a$$

Radius of a polygon

Segment from **center** to **vertex** of the **polygon**

Central Angle

The **angle** between two consecutive **radii**



Apothem

The **perpendicular** segment from the **center** to a **side**

The **apothem** bisects the **side** of the **polygon** and the **central angle**