

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

Measure Side Lengths to Determine the Perimeter of Polygons

Math

3



# Measure Side Lengths to Determine the Perimeter of Polygons

Unit 7 Lesson 4

Now that we are familiar with classifying polygons let's learn about finding their perimeters!



# Types of Polygons

## Regular Polygons

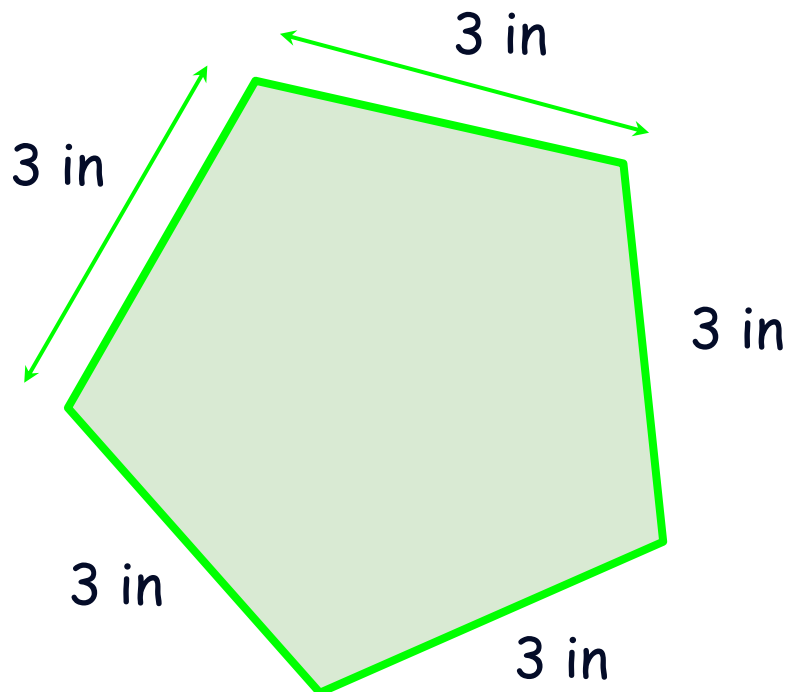
A polygon that has equal sides as well as equal interior angles is known as a regular polygon. Examples:

## Area

A polygon that is neither equilateral nor equiangular is known as an irregular polygon. Examples:

# Perimeter Formula

Perimeter = Sum of all sides



Perimeter =

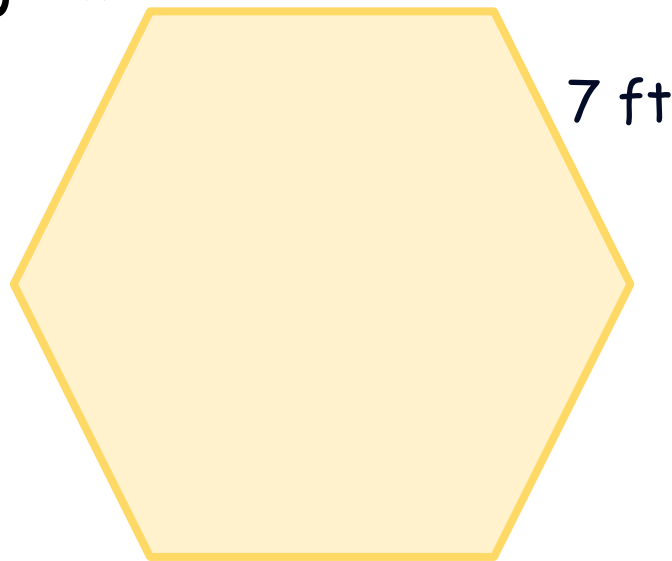
Note:

## Perimeter of Regular Polygons

In regular polygons, the length of each side is the same. To find the perimeter, we simply multiply the side length by the number of sides (e.g. Pentagon with a side length of 3 will be Perimeter =  $3 \times 5 = 15$ )

# Finding the Perimeter

If one side length of the given polygon is 7 feet long what is the perimeter of the polygon?



Length of one side =

Number of sides =

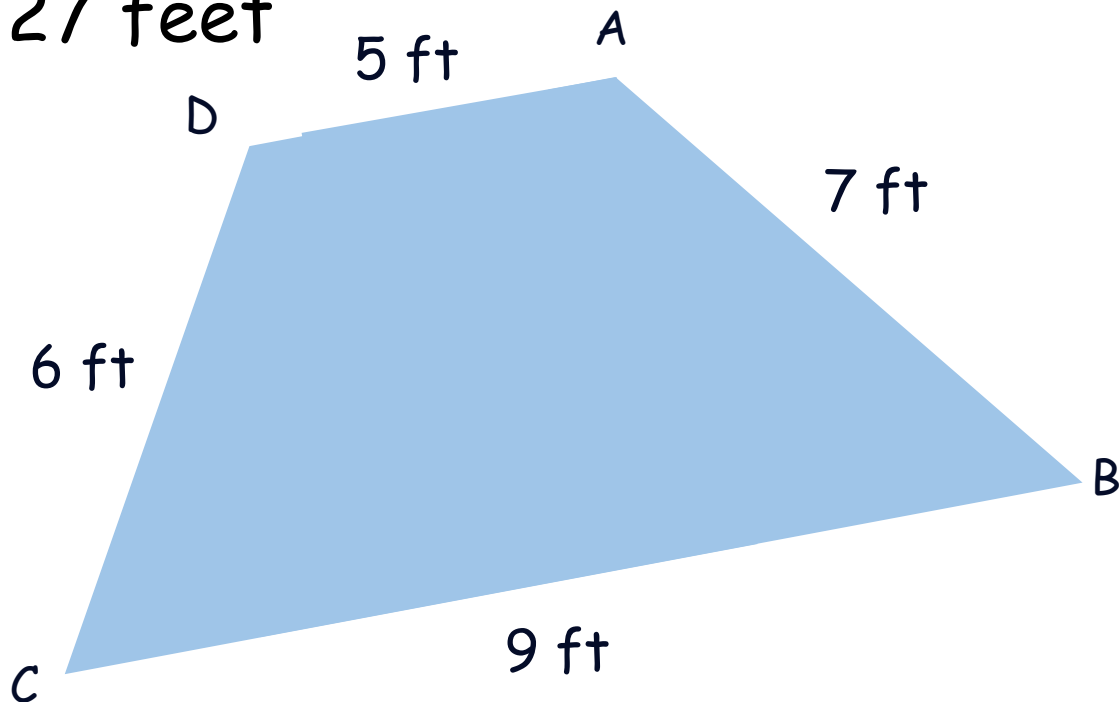
Perimeter =

Perimeter =

Perimeter =

# Finding the Perimeter

Find the measurement of the missing side length if the polygon's perimeter is 27 feet



*We can also label each edge for irregular polygons when finding their perimeter*

**AB** =

**BC** =

**CD** =

**DA** =

$$\text{Perimeter} = 7 + 9 + x + 5 = 27 \text{ feet}$$