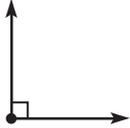


Name _____

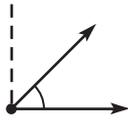
Describe Angles in Plane Shapes

There are different types of angles.

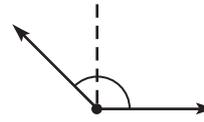
A **right angle** forms a square corner.



Some angles are less than a right angle.



Some angles are greater than a right angle.

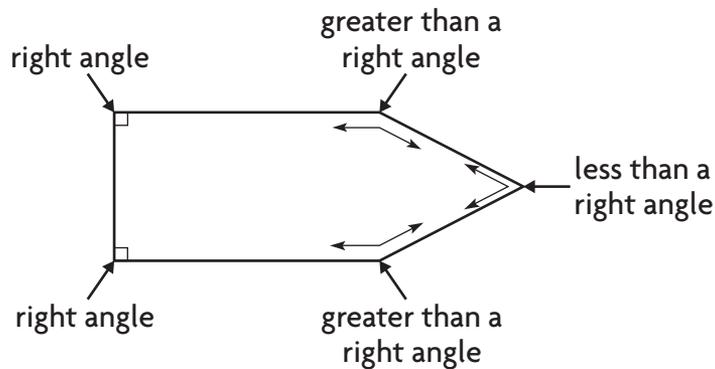


Look at this shape.
Describe the angles.

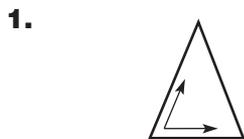
There are **2** right angles.

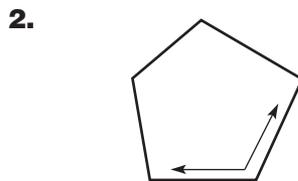
There are **2** angles greater than a right angle.

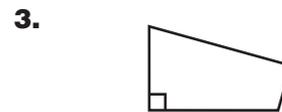
There is **1** angle less than a right angle.



Use the corner of a sheet of paper to tell whether the angle is a **right angle**, **less than a right angle**, or **greater than a right angle**.



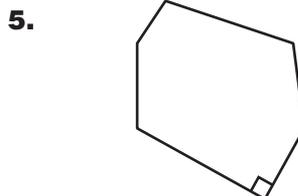




Write how many of each type of angle the shape has.



___ right
___ less than a right
___ greater than a right



___ right
___ less than a right
___ greater than a right



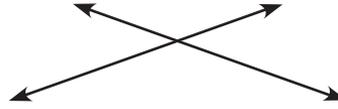
___ right
___ less than a right
___ greater than a right

Name _____

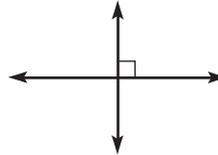
Describe Sides of Polygons

There are different types of line segments in polygons.

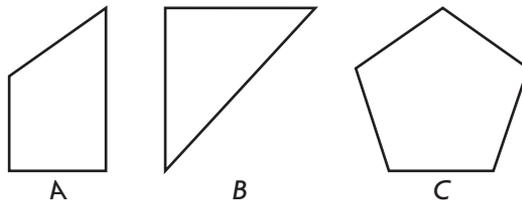
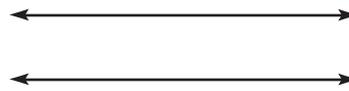
- **Intersecting lines** are lines that cross or meet. Intersecting lines form angles.



- **Perpendicular lines** are intersecting lines that cross or meet to form right angles.



- Lines that appear never to cross or meet and are always the same distance apart are **parallel lines**. They never form angles.

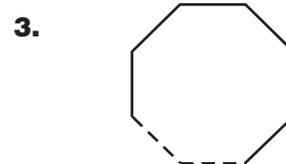
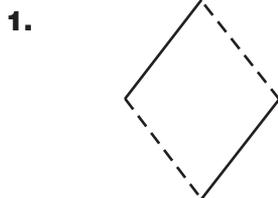


Which shape or shapes appear to have parallel sides? **A**

Which shape or shapes appear to have perpendicular sides? **A, B**

Which shape or shapes appear to have intersecting sides? **A, B, C**

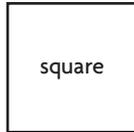
Look at the dashed sides of the polygon. Tell if they appear to be *intersecting*, *perpendicular*, or *parallel*. Write all the words that describe the sides.



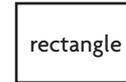
Name _____

Classify Quadrilaterals

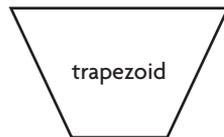
You can classify quadrilaterals by their sides and by their angles.



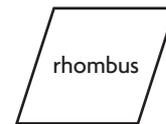
- 2 pairs of opposite sides that are parallel
- 4 sides that are of equal length
- 4 right angles



- 2 pairs of opposite sides that are parallel
- 2 pairs of sides that are of equal length
- 4 right angles



- 1 pair of opposite sides that are parallel
- lengths of sides could be the same.



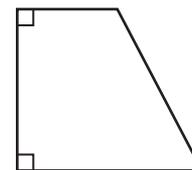
- 2 pairs of opposite sides that are parallel
- 4 sides that are of equal length

How can you classify the quadrilateral?

It has only 1 pair of opposite sides that are **parallel**.

The lengths of all 4 sides are **not equal**.

So, the quadrilateral is a **trapezoid**.



Circle all the words that describe the quadrilateral.



- square
- rhombus
- trapezoid



- square
- rectangle
- quadrilateral



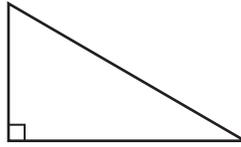
- square
- rectangle
- rhombus

Name _____

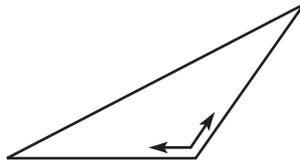
Describe Triangles

You can describe a triangle by its types of angles.

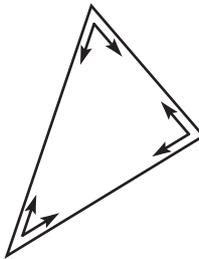
This triangle has **1** right angle.



This triangle has **1** angle greater than a right angle.

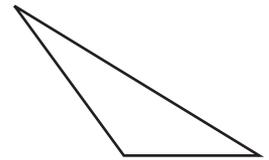


This triangle has **3** angles less than a right angle.

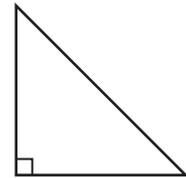


You can describe a triangle by the number of sides of equal length.

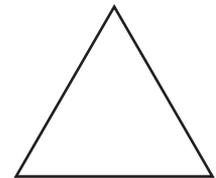
This triangle has **0** sides of the same length.



This triangle has **2** sides of the same length.

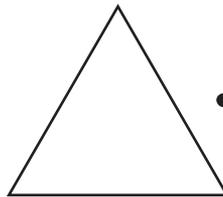


This triangle has **3** sides of the same length.

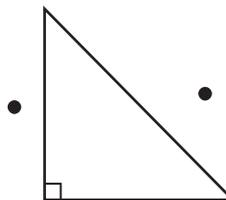


Draw a line to match the description of the triangle(s).

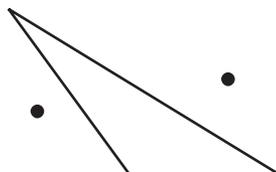
1. One angle is a right angle.



2. One angle is greater than a right angle.



3. Three angles are less than a right angle.



4. No sides are equal in length.



5. Two sides are equal in length.



6. Three sides are equal in length.



Name _____

Relate Shapes, Fractions, and Area

You can separate a plane shape into equal parts to explore the relationship between fractions and area.

Divide the rectangle into 6 parts with equal area. Write the fraction that names the area of each part of the whole.

Step 1 Draw lines to divide the rectangle into 6 parts with equal area. Use the grid to help you.

Step 2 Write the fraction that names each part of the divided whole.

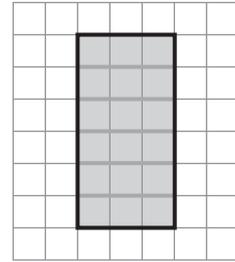
Think: Each part is 1 part out of 6 equal parts.

Each part is $\frac{1}{6}$ of the whole shape's area.

Step 3 Write the fraction that names the whole area.

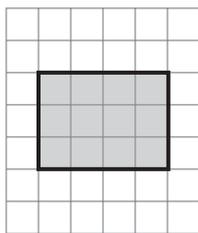
Think: There are 6 equal parts.

The fraction that names the whole area is $\frac{6}{6}$.



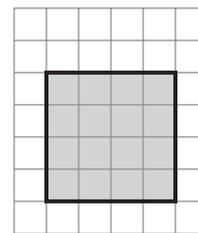
Draw lines to divide the shape into parts with equal area. Write the area of each part as a unit fraction.

1. 4 equal parts



Each part is _____ of the whole shape's area.

2. 8 equal parts



Each part is _____ of the whole shape's area.