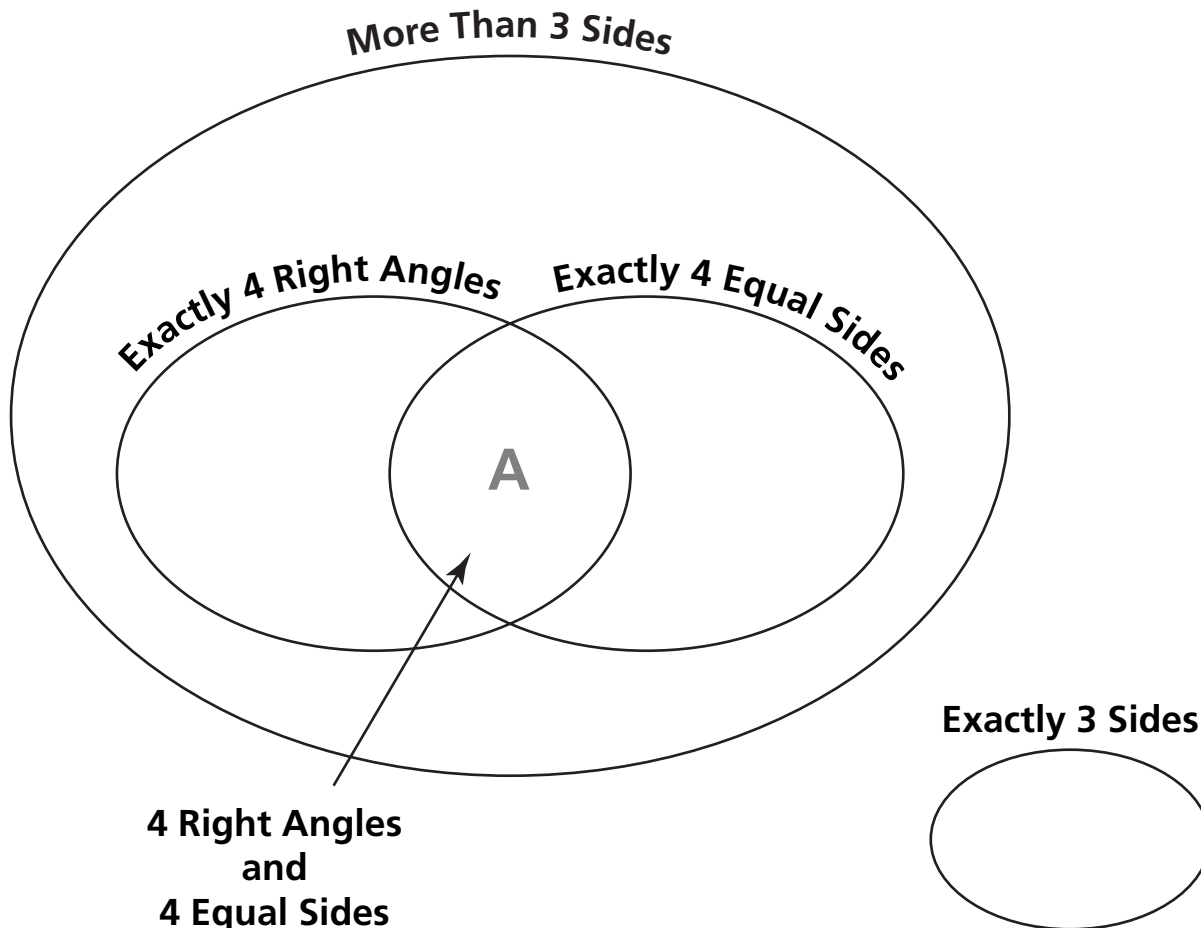# Classifying Polygons by the Number of Right Angles
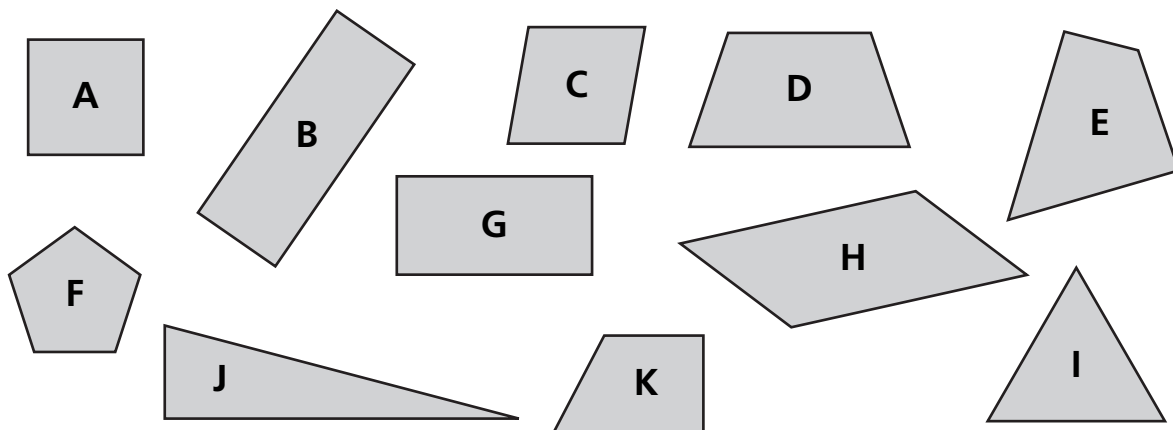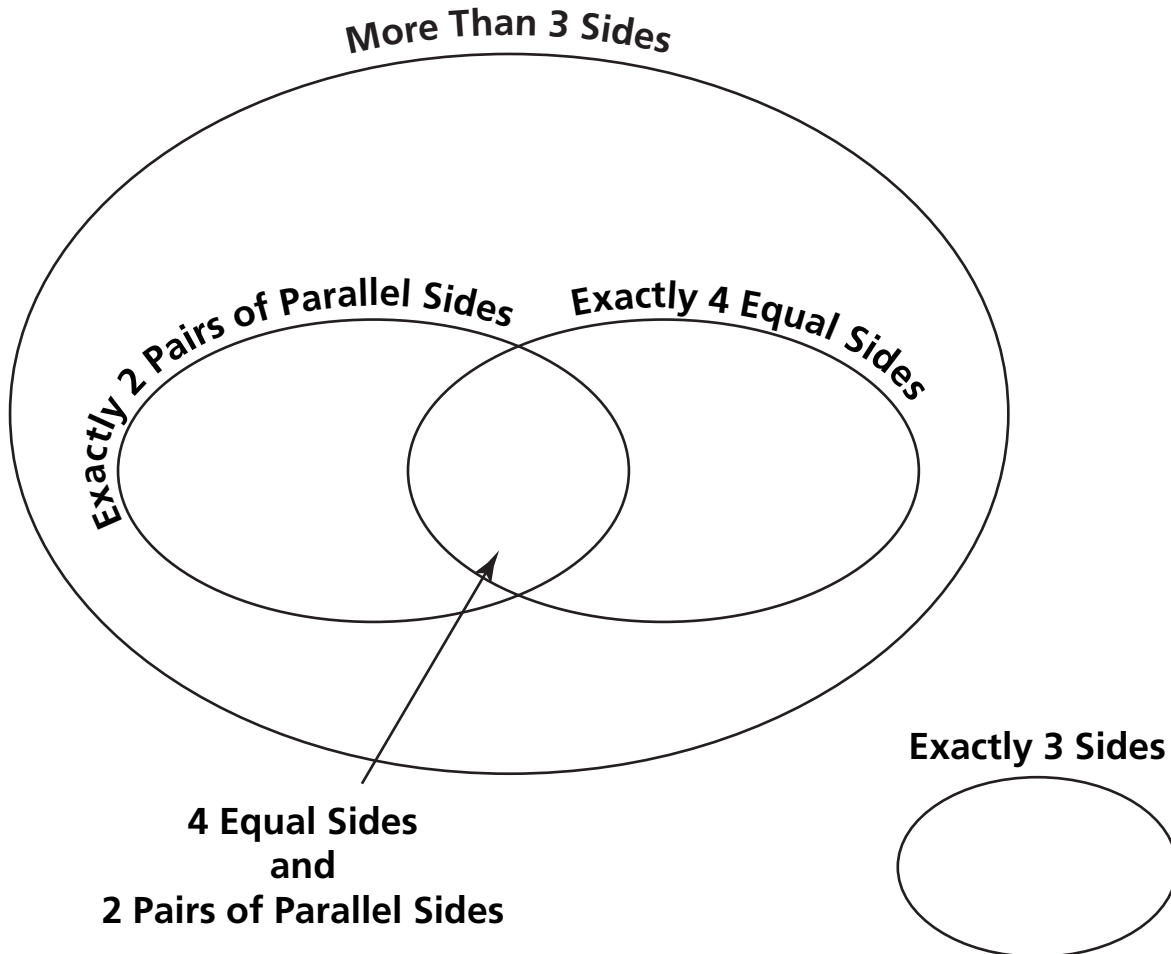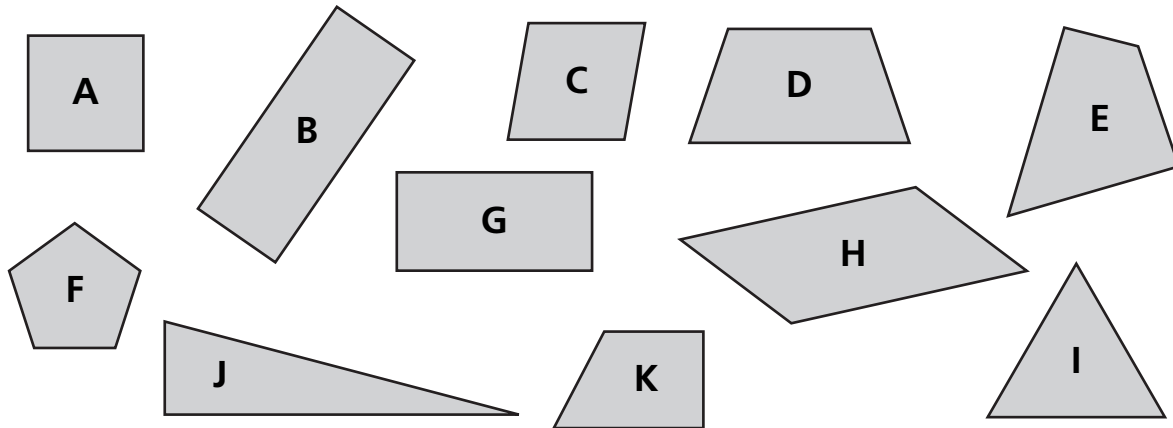
Write the letter of each figure in the oval that describes it.

A B C D E G F H J K I

More Than 3 Sides

Exactly 4 Right Angles **Exactly 4 Equal Sides**

A

4 Right Angles
and
4 Equal Sides

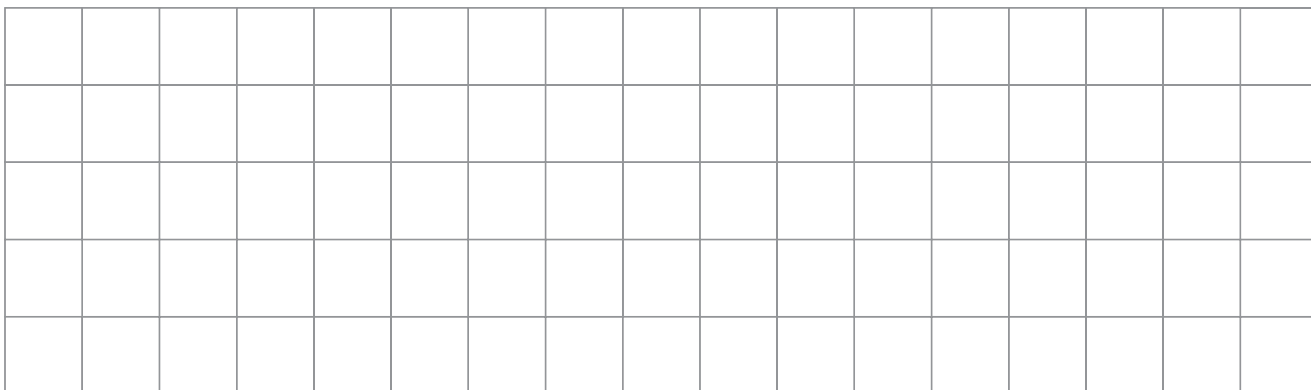**Exactly 3 Sides**

Classifying Polygons Using Pairs of Parallel Sides

Write the letter of each figure in the oval that describes it.

A   B   C   D   E

G   H

F

J   K   I

More Than 3 Sides

Exactly 2 Pairs of Parallel Sides   Exactly 4 Equal Sides

**4 Equal Sides
and
2 Pairs of Parallel Sides**
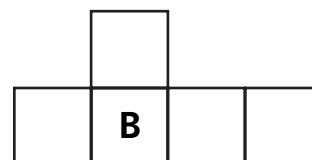
Exactly 3 Sides

Identifying Congruent Figures

1 Draw as many figures as possible on the grid below. However:

• all figures you draw must have the same area as figure A,

• one figure must be congruent to figure A,

• there should be no congruent figures, and

• draw only on the grid lines.
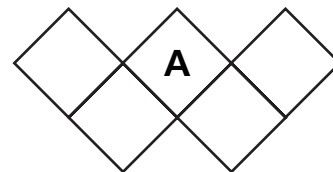
2 Use the grid to draw at least 4 figures that are congruent to figure B.
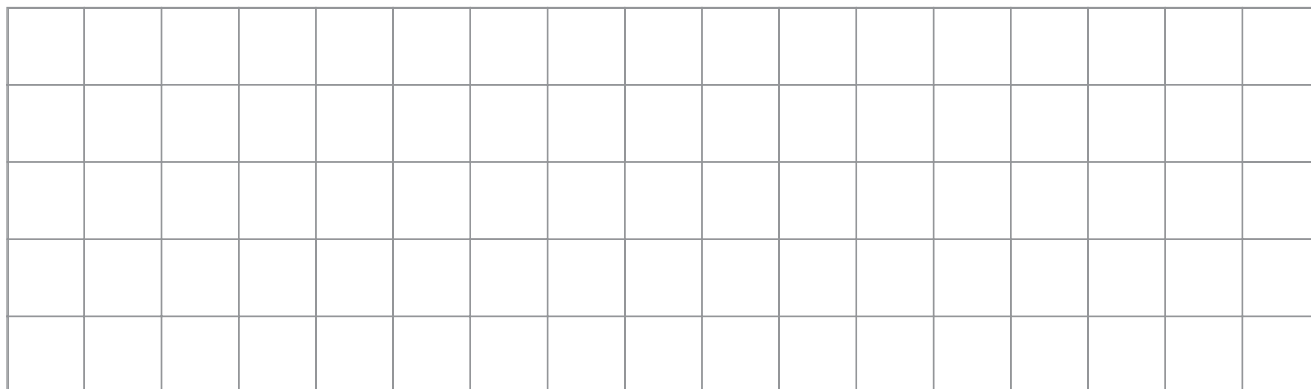
Working with Lines of Symmetry

Draw 3-sided polygons for each.

1 exactly 3 equal sides | **2** exactly 2 equal sides | **3** no equal sides

Draw 4-sided polygons for each.

4 4 equal sides | **5** exactly 2 equal sides | **6** 2 pairs of equal sides

7 Circle all the figures you drew that have at least
1 line of symmetry.

Identifying Attributes of Two-Dimensional Figures

Cut out the two congruent triangles at the bottom of the page. Create various figures by matching congruent sides. Trace your figures onto this page, and then draw all lines of symmetry on each figure.

Identifying and Defining Polygons

Follow the directions.

1 Place point *A* at (1,4).

Place point *B* at (3,6).

Place point *C* at (5,6).
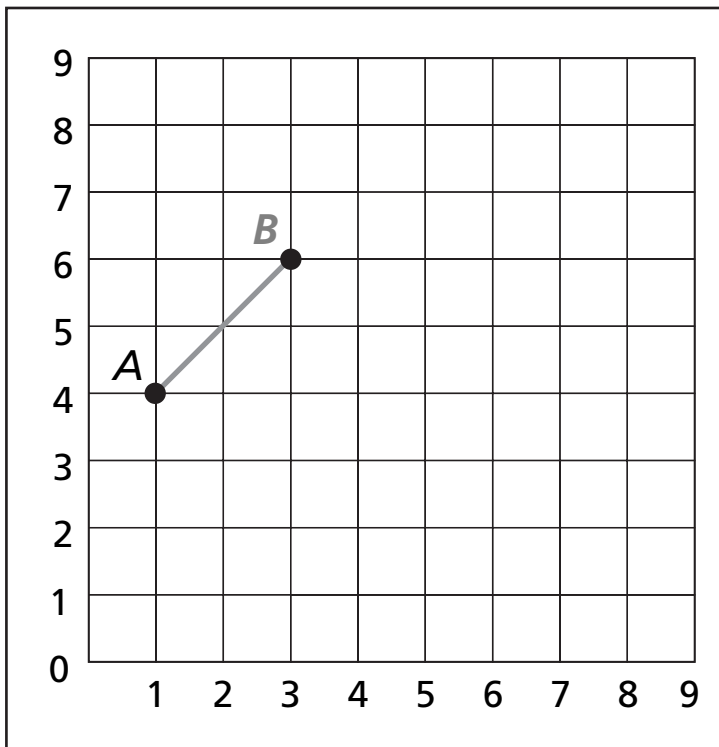
Place point *D* at (5,4).

Place point *E* at (3,2).

Place point *F* at (1,2).

Draw $\overline{AB}$.

Draw $\overline{BC}$.

Draw $\overline{CD}$.

Draw $\overline{AD}$.

A→B→C→D→A is the instruction for drawing a trapezoid with corners at 4 of the points you plotted. Use the points you plotted to give the instructions for drawing:

2 a different trapezoid   _____

3 a square   _____

4 a pentagon   _____

5 a hexagon   _____

6 What other polygon can you make using the points on the grid?

_____

Making a Figure Zoo

Make a three-dimensional figure by cutting the large net below along the heavy lines and folding along the dashed lines. Then answer the questions about the figure.

1 How many faces does figure DD have?

_____ faces

2 How many faces have at least 2 lines of symmetry?

_____ faces

3 Is figure DD a pyramid?

Circle one: Yes   No

4 Is figure DD a prism?

Circle one: Yes   No

5 On the small copy of the net, shade two faces that are congruent and opposite each other on the figure.
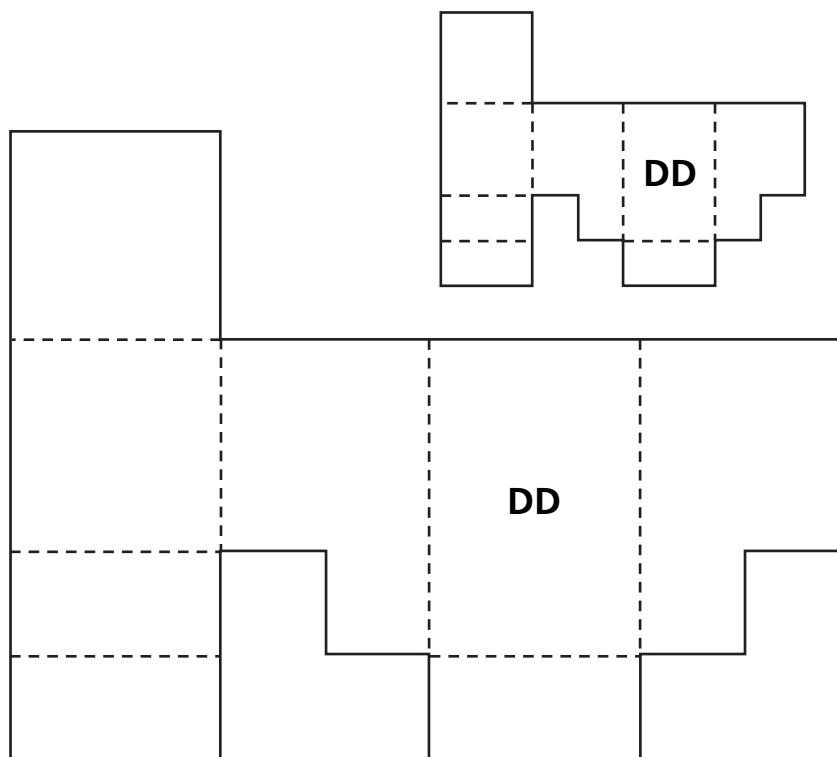
Figure Safari

1 Find all the figures in the class Figure Zoo that match this set of clues:

CLUES:

• At least 1 of my faces is a triangle.

• All of my faces have at least 1 line of symmetry.

Figures: _____

---

2 Choose one of the figures that matches the clues above.

Figure: _____

---

3 Write one or two more clues so your chosen figure is the only figure that matches all the clues.
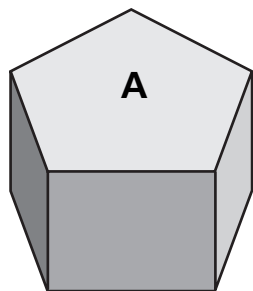
CLUES:

• At least 1 of my faces is a triangle.
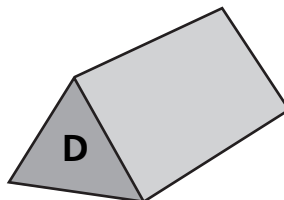
• All of my faces have at least 1 line of symmetry.

• _____

_____

_____

• _____

_____

_____

Describing Three-Dimensional Figures

Use the diagrams of the three-dimensional figures to write the numbers in the blanks.

A

Prism 1

D

Prism 2

E
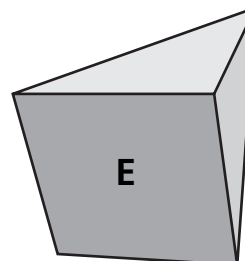
Pyramid 1

1 **Face A** has _____ sides.

Prism 1 has _____ edges.

_____ × the number of sides of = the number of edges
one of the parallel faces   of the prism

---

2 **Face D** has _____ sides.

Prism 2 has _____ edges.

_____ × the number of sides of = the number of edges
one of the parallel faces   of the prism

---

3 **Face E** of Pyramid 1 has _____ sides.

Pyramid 1 has _____ edges.

_____ × the number of sides = the number of edges
of the bottom face   of the pyramid