Name That Polygon!

Polygons are classified by the number of sides they have and by the lengths of their sides.

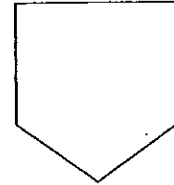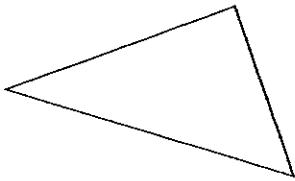|	
3 sides—triangle	7 sides—heptagon
4 sides—quadrilateral	8 sides—octagon
5 sides—pentagon	9 sides—nonagon
6 sides—hexagon	10 sides—decagon

A polygon with all its sides of equal length
is called a **regular** polygon.

Classify each polygon. If it is a regular polygon, write **R** on the drawing.
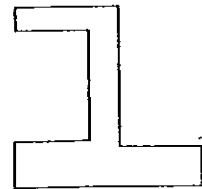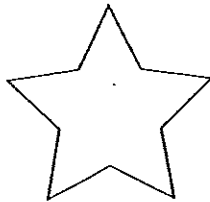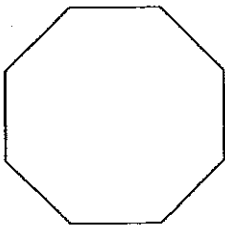
A.
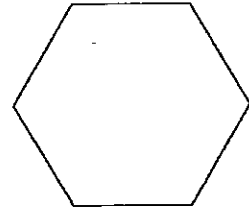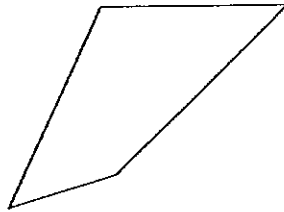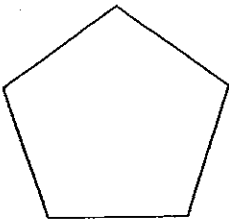
B.

C.

On the back of this page, draw a hexagon, an octagon, and a regular quadrilateral.
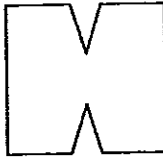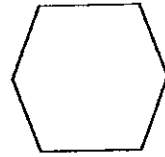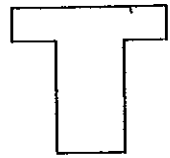
In Exercises 1–4, name the polygon.
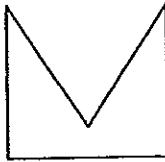
1.
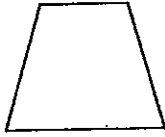
2.

3.

4.

In Exercises 5–8, decide whether the figure is a polygon. If it is, name it. If it is not, explain why.
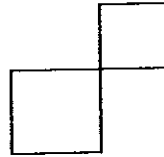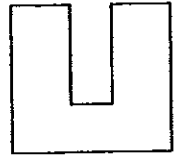
5.

6.

7.

8.

9. Draw a quadrilateral with sides of different lengths.

10. Draw a hexagon with four sides equal in measure.

11. Draw an octagon with all sides equal in measure.

In Exercises 12–18, complete the table. All polygons in the table are considered to be regular.

	Type of Polygon	Number of sides	Number of vertices	Total number of diagonals
12.	Triangle			
13.		8		
14.	Nonagon			
15.				2
16.			6	
17.				5
18.	Decagon			

In Exercises 19–22, decide whether the outer edge of the sign is a polygon. If it is not, explain why it isn't.

19.

DANGER
RESTRICTED
AREA

20.

P

21.

SORRY WE ARE
CLOSED

22.