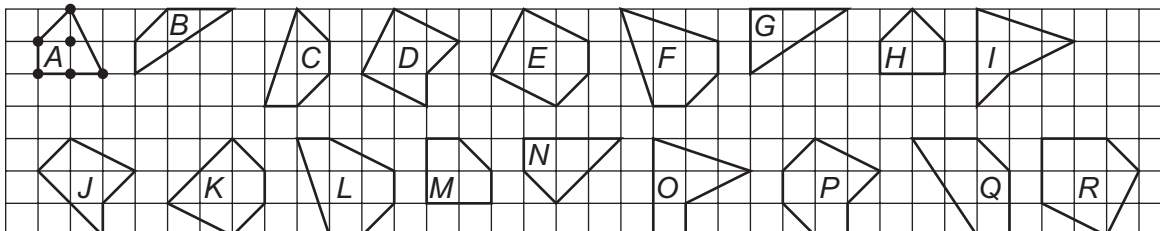


LESSON **Geometry Lab Recording Sheet** p. 613

9-3 *Develop Pick's Formula*

Try This



Activity 1

1. Find the area of each figure. Create a table like the one below with a row for each shape to record your answers. The first one is done for you.
2. Count the number of lattice points on the boundary of each figure. Record your answers in the table.
3. Count the number of lattice points in the interior of each figure. Record your answers in the table.

Figure	Area	Number of Lattice Points	
		On Boundary	In Interior
A	2.5	5	1
B			
C			
D			
E			
F			
G			
H			
I			
J			
K			
L			
M			
N			
O			
P			
Q			
R			

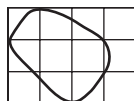
LESSON **9-3** **Geometry Lab Recording Sheet** p. 613
Develop Pick's Formula continued

Try This

- 1. Make a Conjecture** What do you think is true about the relationship between the area and the number of lattice points on the boundary and in the interior of the figure? Write your conjecture as a formula in terms of B , the number of lattice points on the boundary, and I , the number of lattice points in the interior.

- 2.** Test your conjecture by drawing at least three different figures on graph paper and finding their areas.

- 3.** Estimate the area of the curved figure using a lattice polygon.



- 4.** Find the shaded area in the figure by subtracting. Test your formula on this figure. Does your formula work for figures with "holes" in them?

