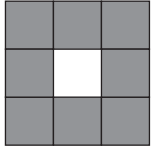


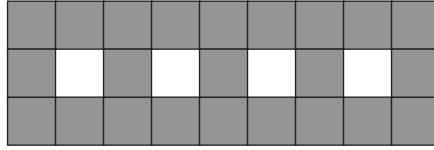
Name: \_\_\_\_\_

## *Paths*

Katrina is planning to make a path in her garden. Two different paths with Katrina's same general design are shown below.



Path 1



Path 4

1. Draw path number 2 and path number 5 below.



2. Complete the table below

Path Number	Number of Gray Tiles	Number of White Tiles	Total Number of Tiles
1			
2			
3			
4			
5			
6			

3. A direct formula for the number of white tiles in each path is  $W = P$ , where  $W$  stands for the number of white tiles and  $P$  for the path number.

(a) Write a direct formula to find the number of gray tiles,  $G$ , in any path number,  $P$ .

(b) Make a drawing using tiles patterns to show how your formula can be used to find the number of gray tiles.

(c) Write a direct formula for the total number of tiles,  $T$ , if you know the path number,  $P$ .  
Explain your reasoning.