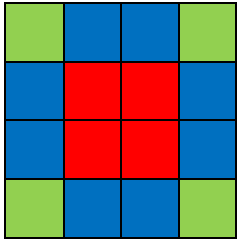


# Comparing Patterns 1 and 2

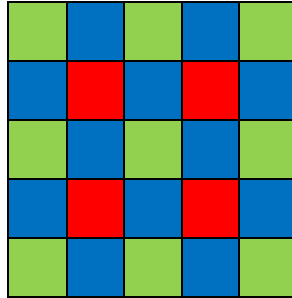
Compare Pattern 1 and Pattern 2. Be sure to include information about the table, formulas and graph.

# Pattern 1: Tiles

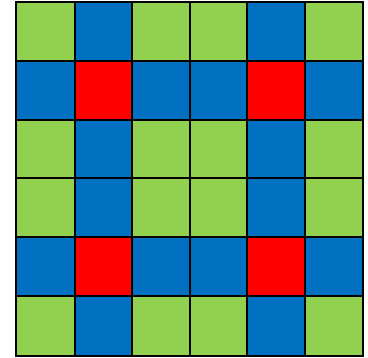
A king has chosen you, the best tile master team in the kingdom, to design tile patterns for the floor of his new castle. He has asked you to present to him original tile patterns that you will have your workers follow. Below is your first tile design that can be used in different sized rooms. Your task is to expand the pattern and determine how many tiles of each color are needed as the rooms grow in size.



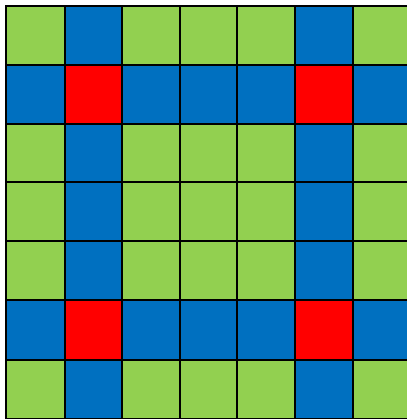
4 units



5 units

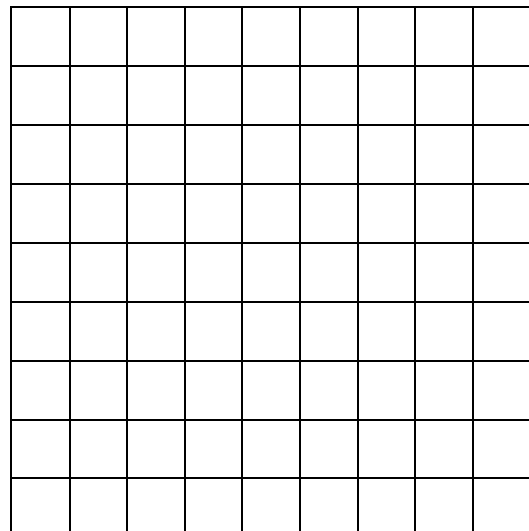
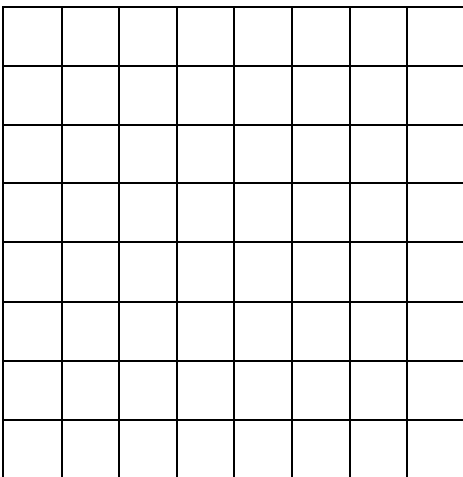


3  
6 units



7 units

Continue the pattern to show how the design will look in rooms that are larger. Be sure your pattern stays consistent as it grows below. Use the colored pencils to show how the patterns will look.



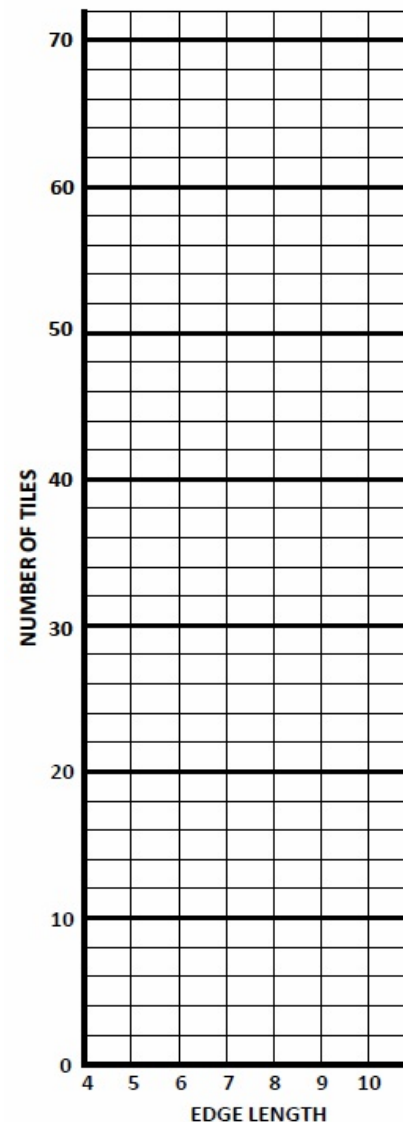
# Pattern 2: Table and Graph

Using Pattern 2, fill in the numbers in the table below.

Table of Values				
Edge Length	Color 1 Tiles	Color 2 Tiles	Color 3 Tiles	Total Tiles
4				
5				
6				
7				
8				
9				
10				
15				
*50				
*E Using E=edge length write an equation for determining the number of color tiles for each color tiles for each color, given any number	Color 1 Tile Equation _____ Color 2 Tile Equation _____ Color 3 Tile Equation _____			

Using the colored pencils, graph the three patterns for the edge lengths and the tiles. Be sure to use the same color pencils as the tiles.

Graph



# Pattern 1: Questions

Read the following questions. Record your responses on this page.

1. Describe the patterns you observed in the pictures, table, and graph.
2. Describe how the equations are related to the visual tile pattern, graph, and the number chart.



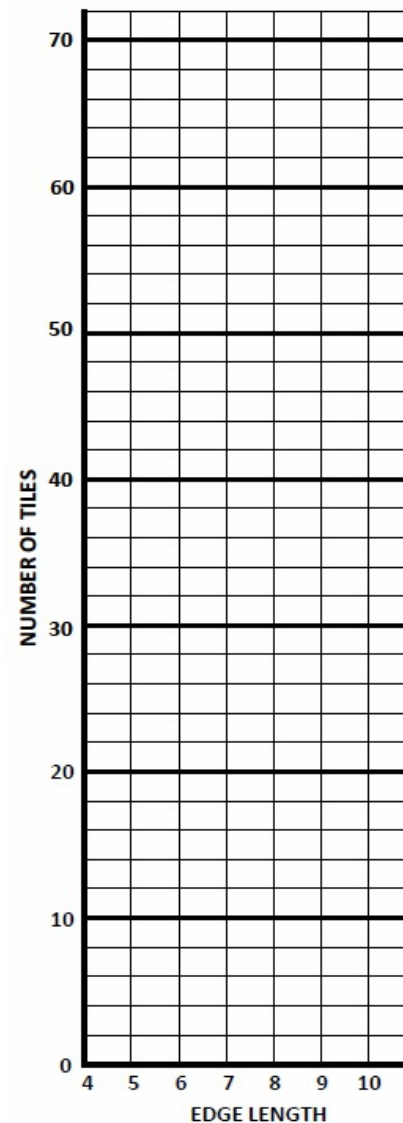
# Pattern 2: Table and Graph

Using Pattern 2, fill in the numbers in the table below.

Table of Values				
Edge Length	Color 1 Tiles	Color 2 Tiles	Color 3 Tiles	Total Tiles
4				
5				
6				
7				
8				
9				
10				
15				
*50				
*E Using E=edge length write an equation for determining the number of color tiles for each color tiles for each color, given any number	Color 1 Tile Equation _____ Color 2 Tile Equation _____ Color 3 Tile Equation _____			

Using the colored pencils, graph the three patterns for the edge lengths and the tiles. Be sure to use the same color pencils as the tiles.

Graph



# Pattern 2: Questions

Read the following questions. Record your responses on this page.

1. Describe the patterns you observed in the pictures, table, and graph.
2. Describe how the equations are related to the visual tile pattern, graph, and the number chart.