

Review of Patterns
Math 8

Name: _____

1. (a) For the pattern below, draw the figure that would come next.



Figure 1

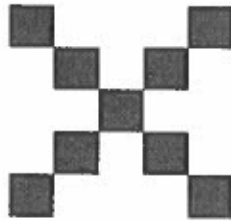


Figure 2

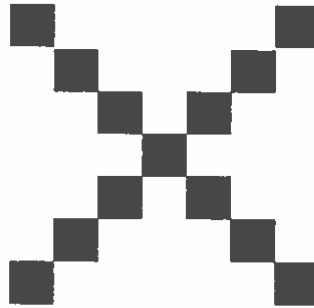


Figure 3

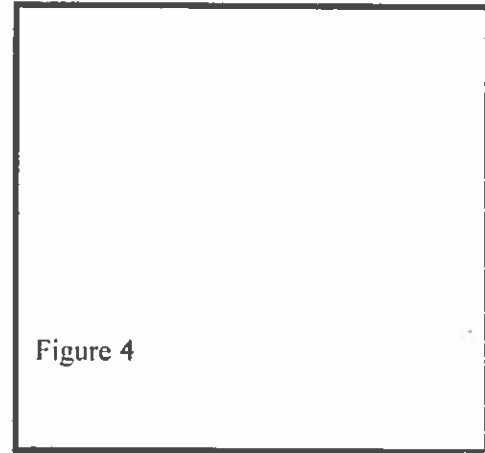


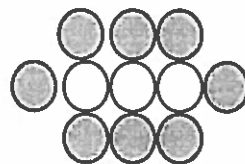
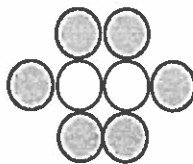
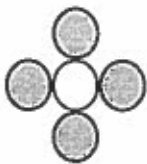
Figure 4

(b) Fill in the table below from the pattern.

<i>Figure</i>	1	2	3	4
<i>Number of Squares</i>	5			

(c) Describe the pattern. *Think:* How does the pattern change from one figure to the next? How many squares are added each time?

2. A pattern is made using white and grey circles.



Complete the table for this pattern.

White Circles	1	2	3	4	5	6
Grey Circles	4					

3. Using three toothpicks, create a triangle. This will be figure 1.

(a) Sketch figure 1.

(b) Add more toothpicks to create a second triangle that is attached to the first. This will be figure 2. Sketch this figure.

(c) Continue this pattern until you have formed six triangles. Sketch figure 6.

(d) Fill in the table below.

Figure	1	2	3	4	5	6
Number of Toothpicks	3					

(e) Describe the pattern. How many toothpicks are added each time to form an additional triangle?