Check Up
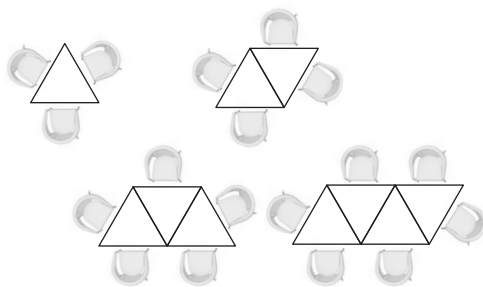
1. Describe each of the patterns in words and state the next two letters or number values in the pattern.

   a.   c, f, i, …

   b.   –3, 0, 3, 6, …

2. A small café has equilateral triangle tables that can be rearranged to seat more than 3 people at a time.

   a.   Describe the pattern using a table of values.

Number of Tables					
Number of People					

   b.   Describe the pattern using words.

3. Describe each of the following patterns using an algebraic expression.

   a.   Carmen has a collection of t-shirts. She gives 12 shirts away to her friends. How many shirts does she still have?

   b.   Jody has 5 times as many roses as Erika. How many roses does Jody have?

☑ Compare your answers.

1. Describe each of the patterns in words and state the next two letters or number values in the pattern.

   a. c, f, i,…

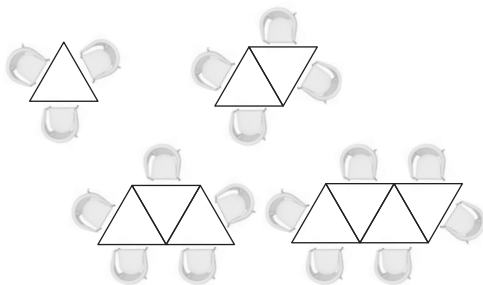   Every third letter of the alphabet is listed, starting with the letter "c".

      c, f, i, **l, o**

   b. –3, 0, 3, 6,…

      Starting with –3, the numbers increase by 3.

      –3, 0, 3, 6, **9, 12**

2. A small café has equilateral triangle tables that can be rearranged to seat more than 3 people at a time.

   a. Describe the pattern using a table of values.

Number of Tables	1	2	3	4
Number of People	3	4	5	6

   b. Describe the pattern using words.

      The first triangular table seats three people. With each additional table, one more person can sit.

3. Describe each of the following patterns using an algebraic expression.

   a. Carmen has a collection of t-shirts. She gives 12 shirts away to her friends. How many shirts does she still have?

      Let s be Carmen's original number of t-shirts.

      The expression is $s - 12$. Carmen still has $s - 12$ shirts.

   b. Jody has 5 times as many roses as Erika. How many roses does Jody have?

      Let r be the number of roses belonging to Erika.

      The expression is $5r$. Jody has $5r$ roses.