Piles of Cubes II
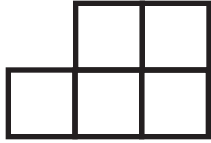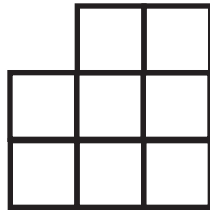
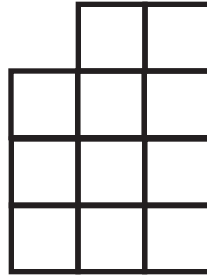1. Follow the pattern to build the next three piles.

Pile 1   Pile 2   Pile 3

2. Use the piles and cubes to complete the table.

Pile Number	Number of Cubes
1	5
2	8
3	11
4	
5	
6	

3. Answer the following questions.
   - *How many cubes would there be in the 10th pile?*
   - *The 20th pile?*
   - *How do you know?*

4. Use words to describe how to find the number of cubes in the 100th pile.
   - *If **p** is the pile number, then how many cubes will be in **p** piles?*
   - Think: *What are you doing to the pile number to get the number of cubes?*

5. Use the rule that your wrote in question number 4 above to find out how many cubes would be in pile 15.

New Terminology:

p is called a variable.

The rule you wrote is called an algebraic expression.