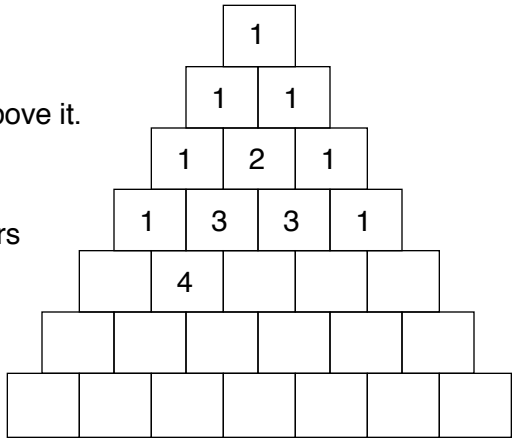
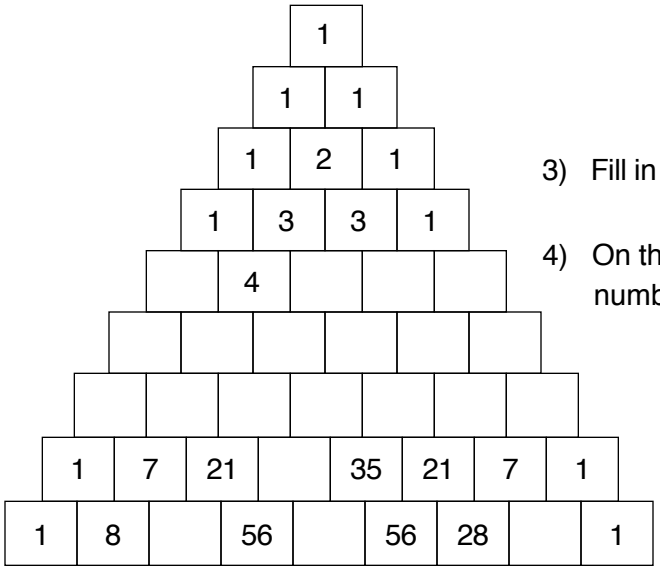
Pascal's triangle was developed by a man named Blaise Pascal in the seventeenth century. It has applications that you will learn about in Algebra 2. For now, we will look at some of the interesting patterns in the triangle.

Follow the directions.



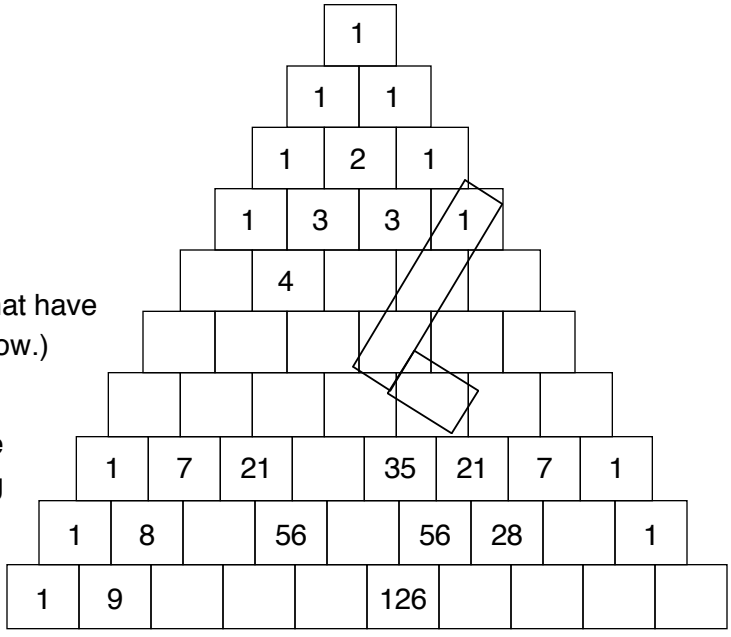
1) Look at the triangle on the right. Compare each row with the one above it. Find the pattern and fill in the rest of the empty boxes.

2) On the same triangle, shade or color all the boxes that have numbers divisible by 2 (even numbers).



3) Fill in the missing numbers in the triangle on the left.

4) On the same triangle, shade or color all the boxes that have numbers divisible by 3.



5) Fill in the missing numbers in the triangle on the right.

6) On the same triangle, shade or color all the boxes that have numbers divisible by 5. (Ignore the extra lines for now.)

If you like, you can draw the triangle on another piece of paper, making it as large as you wish, and try coloring other multiples.

7) Look at the "hockey stick" shape on the triangle above. Find the sum of the numbers in the long rectangle and compare your answer with the number in the short rectangle.

8) Draw another hockey stick of any length you like. It can slant to the right or the left. Find the sum of the numbers in the long rectangle and compare your answer with the number in the short rectangle.