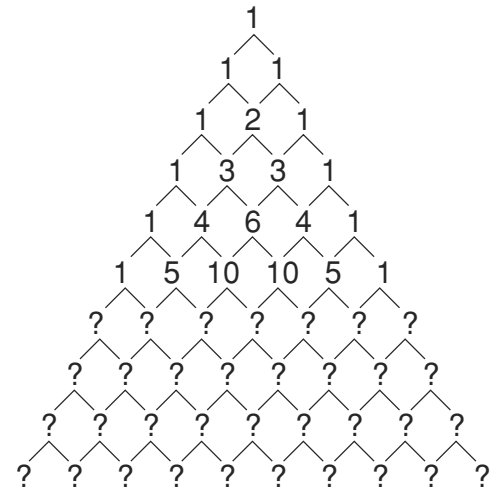


LESSON **Challenge**
1-1 Pascal's Triangle

The pattern at the right is called Pascal's Triangle. This pattern is named after the French mathematician, Blaise Pascal, because he wrote about its properties.

Row 0
 Row 1
 Row 2
 Row 3
 Row 4
 Row 5
 Row 6
 Row 7
 Row 8
 Row 9



Use Pascal's Triangle to solve problems 1-5.

1. Write the sum of the numbers in each of rows 1-5. What pattern do you see?

2. Use the pattern that you found in problem 1 to predict the sum for row 9. _____

3. Look at the numbers in row 4 and the numbers they are connected to in row 3. Then look at the numbers in row 5 and the numbers they are connected to in row 4. What pattern do you see?

4. Use the pattern you found in problem 3 to find the numbers for rows 6-9.

row 6: _____

row 7: _____

row 8: _____

row 9: _____

5. Find the sum of the numbers in row 9. How does it compare to your prediction in problem 2? _____