Creating Rules to Define Sequences

1. Determine the **next three terms** in the sequence

    1, 8, 16, 26, 39, 56, 78 ...

2. Determine the **recursive formula** of the sequence

    5, 14, 41, 122, 365, 1094, 3281 ...

3. Determine the **general term** of the sequence

$$\frac{3}{4}, \frac{5}{9}, \frac{7}{16}, \frac{9}{25}, \frac{11}{36}, \frac{13}{49}, \frac{15}{64} \ldots$$

4. The Fibonacci Sequence is the series of numbers:

$$0, 1, 1, 2, 3, 5, 8 \ldots$$

   a. Determine the next 3 terms in the Fibonacci Sequence.
   b. Determine the recursive formula for the Fibonacci Sequence.