

Math 270 - Basic Discrete Mathematics
Practice Quiz on Section 5.7

Directions: Answer the problem given below.

1. Let x_1, x_2, x_3, \dots be the sequence defined recursively as

$$x_1 = 1 \text{ and for all } k \geq 2, x_k = x_{k-1} + 2k + 1.$$

Find (but do not prove) an explicit formula for this sequence.