Math 270 - Basic Discrete Mathematics Practice Quiz on Section 5.8

Directions: Answer the problems given below.

1. Find an explicit formula for the sequence a_1, a_2, a_3, \ldots given by

$$a_1 = 1, a_2 = 2$$
, and $a_k = 3a_{k-1} - 2a_{k-2}$ for all $k \ge 3$.