

490

d)

$$a_1 = 3 \quad a_2 = 5$$

$$a_{n+2} = 3(a_{n+1} + a_n) - 1$$

$$n = 1$$

$$a_3 = 3(a_2 + a_1) - 1 = 3(5 + 3) - 1 = 23$$

$$n = 2$$

$$a_4 = 3(a_3 + a_2) - 1 = 3(23 + 5) - 1 = 83$$

$$n = 3$$

$$a_5 = 3(a_4 + a_3) - 1 = 3(83 + 23) - 1 = 317$$

