

MA 103
Board Problems Lesson 45

Find the analytic form of each recursion equation with the specified initial condition.

Use that analytic form to find $\lim_{n \rightarrow \infty} p_n$.

1. $p_n = 0.85p_{n-1} + 150$, $p_0 = 400$

2. $p_n = 0.85p_{n-1} + 150$, p_0

3. $p_n = 2p_{n-1} + 1$, $p_1 = 1$

4. $p_n = 2p_{n-1} + 1$, p_1

5. $p_n = 1 - 2p_{n-1}$, p_0