1) A sequence is given by $T_n = 6T_{n-2} - T_{n-1}$, and it is known that $T_0 = 8$. Find four solutions to this recurrence relation.

2) A sequence is given by $T_n = 10T_{\lfloor \frac{n}{3} \rfloor} + n^2$. Find an asymptotic expression for T_n using big-oh.