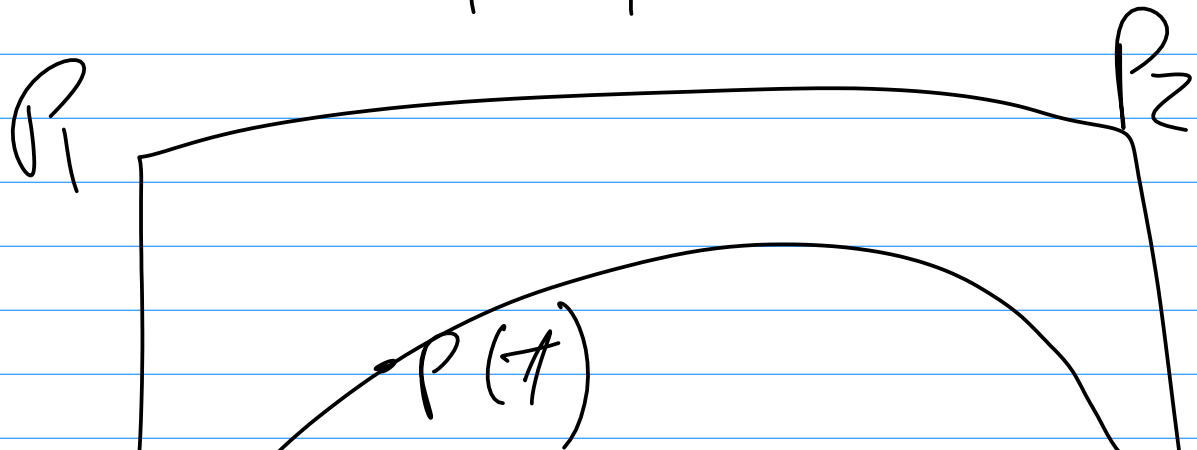


CG 11/30/16 P1



$$P(t) = \sum_{i=0}^3 \binom{3}{i} t^i (1-t)^{3-i} P_i$$

$$\text{eg. } P(.1) = \sum_{i=0}^3 \binom{3}{i} (.1)^i (.9)^{3-i} P_i$$

$$\begin{aligned}
 & \cancel{(.1)^3} P_0 + 3(.1)(.9^2) P_1 \\
 & + 3(.1^2)(.9) P_2 + (.1)^3 P_3 \\
 & = .729 P_0 + .243 P_1 + .27 P_2 + .001 P_3
 \end{aligned}$$

4

