

Problem 25
Risk and Design Life for a Levee Project

[a] 2 pts

$$P(\text{Fail in a given year}) = \boxed{0.0333}$$

[b] 2 pts

$$P(\text{No flood in 6 years}) = \boxed{0.8159}$$

[c] 2 pts

$$P(\text{At least one flood in 6 years}) = \boxed{0.1841}$$

[d] 2 pts

$$\text{Design Life} = \boxed{\sim 8} \text{ years}$$

[e] 2 pts

$$T = \boxed{104.8} \text{ years}$$