

Stochastic Math Models (550.252)
Correction to Exam 1(b) Solutions

PROBLEM 2(d)

$$\begin{aligned}P(0 \leq X \leq 0.5) &= \int_0^{0.5} f(x)dx \\ &= \int_0^{0.5} 2(1-x)dx \\ &= 2x - x^2 \Big|_0^{0.5} \\ &= 1 - 0.25 \\ &= 0.75.\end{aligned}$$

Faster approach

$$\begin{aligned}P(0 \leq X \leq 0.5) &= F(0.5) \\ &= 1 - 0.25 \\ &= 0.75.\end{aligned}$$