

Selected (short) solutions to the Term Test

Problem 1 : $3/4$, $3/4$, $2/3$, $1/2$.

Problem 2 : 2.35 %, 49.9 %.

Problem 3 : easy ...

Problem 4 : Yes, $5/6$, $5/8$, $1/6$.

Problem 5 : $(2/3, 5/4)$, $5/9$, $5/6$, 0.

Problem 6 : 0.3215 %, 3.215 %, 40.187 %, 0.01286 %.

Problem 7 : 16.0 %, 99.752 %, 22.5 %, 99.975 %.

Problem 8 : graph and integral: easy,

$$E[X] = 0,$$

$$F(x) = \frac{1}{2}x^2 + x + \frac{1}{2} \text{ if } x \in [-1, 0),$$

$$F(x) = -\frac{1}{2}x^2 + x + \frac{1}{2} \text{ if } x \in (0, 1].$$

Problem 9 : graph: easy, $7/8$, $1/6$, 0.408.

Problem 10 : See the lecture notes with solutions, page 170+.