

MA (ST) 413 Assignment 2

1. **Loss Models**, page 40, problem 3.25 (Using only ratio of pdf, moment existence, and hazard rate function).
2. **Loss Models**, page 40, problem 3.28.
3. **Loss Models**, page 40, problem 3.29.
4. **Loss Models**, page 60, problem 4.7.
5. **Loss Models**, page 60, problem 4.11.
6. If  $X$  has a gamma distribution with  $\alpha = 3$  and  $\theta = 2$ , express  $Pr(X \leq 12)$  in terms of incomplete gamma function.