

Math 6382 Homework 1
due on 10/2/2016

Show all work. You are welcome to discuss HW with anyone in the class, but submit your own solution. Submit both written answers and R codes.

1. (10pts each) In the textbook, page 94 number 3.2, 3.3, 3.5, 3.7
2. (10pts each) In the textbook, page 95 number 3.8, 3.12, 3.13
3. (10pts) Generate 100 number of X with the pmf

$$f(x) = \frac{6}{\pi^2} \frac{1}{x^2} \text{ for } x = 1, 2, \dots$$

4. (Extra-pts Be creative) Think about changing the 6 cashiers problems discussed in the class and make changes to the way you choose the line. What else could be done to mimic reality? What about the possibility that the cashier will call the manager to open the cashier for a return transaction or even sending someone to pick up an extra-item for one of the customers with extra-time? Just thinking ...

Best wishes!