Student Name _____

1. Overbooking on a flight from Denver, Colorado to Casper, Wyoming requires a decision on how many seats to overbook. Over the last six months, this particular flight had the following overbooking scenario:

No-Shows	Percentage
0	0.3
1	0.25
2	0.2
3	0.15
4	0.1

A one-way ticket costs $80 and the cost of not honoring a reserved flight is a net loss of $100 on the next flight. Using the "critical fractile" probability, $P(d < X)$, how many reservations would you recommend overbooking? What is the expected loss given the optimal overbooking level?