

CS 333202: Probability and Statistics
HW11 Part I

1. A man and a woman decide to meet at a certain location. If each person independently arrives at a time uniformly distributed between 12 noon and 1 P.M., find the probability that the first to arrive has to wait longer than 10 minutes.
2. Let X, Y, Z be independent and uniformly distributed over $(0, 1)$. Compute $P(X \geq YZ)$.
3. Let X and Y be two independent random points from the interval $(0, 1)$. Calculate the probability distribution function and the probability density function of $\max(X, Y)/\min(X, Y)$