CS 333202: Probability and Statistics
HW3 part I

1. $P(X < 1) = 1/2$

   $P(X = 1) = 1/6$

   $P(1 \leq X < 2) = 1/4$

   $P(X > 1/2) = 1/2$

   $P(X = 3/2) = 0$

   $P(1 < X \leq 6) = 1/3$

2. $F(t) = \begin{cases} 0 & t < 0 \\ \frac{t}{45} & 0 \leq t < 45 \\ 1 & t \geq 45. \end{cases}$

3. 0.277