CS 333202: Probability and Statistics
HW6 Part II

1. 46%

2. (a) $c = 3$

   (b) $1 - e^{-3/2} \approx 0.78$

3. (a) $f(x) = \begin{cases} \frac{32}{x^3} & x \geq 4 \\ 0 & x < 4 \end{cases}$

   (b) At most 50 hours: $\frac{9}{25}$

   At least 60 hours: $\frac{4}{9}$

   Between 50 and 70 hours: 0.313

   Between 10 and 35 hours: 0