# CSCE 747 - Availability Activity
# Name(s):

You are building a web store that you feel will unseat Amazon as the king of online shops. Your marketing department has come back with figures stating that - to accomplish your goal - your shop will need an **availability** of at least 99%, a **probability of failure on demand** of less than 0.1, and a **rate of fault occurrence** of less than 2 failures per 8-hour work period.

You have recently finished a testing period of one week (seven full 24-hour days). During this time, 972 requests were served to the page. The product failed a total of 64 times. 37 of those resulted in a system crash, while the remaining 27 resulted in incorrect shopping cart totals. When the system crashes, it takes 2 minutes to restart it.

1. What is the rate of fault occurrence?
2. What is the probability of failure on demand?
3. What is the availability?
4. What additional information would you need to calculate the mean time between failures?
5. Is the product ready to ship? If not, why not?