

Note: To Get points, you should provide detailed expressions for each question.

- 2. (20 points)** You have a website where only one visitor can be on the site at a time, but there is an infinite queue of visitors, so that immediately after a visitor leaves, a new visitor will come onto the website. On average, visitors leave your website after 5 minutes. Assume that the length of stay is exponentially distributed. What is the average number of users leaving your website over a 10-minute interval?