1. Lengths of screws are normally distributed, with mean 2.31 cm and standard deviation 0.03 cm. Find the probability that exactly 8 *or more* out of 10 randomly selected screws are less than 2.35 cm long.

2. A machine requires recalibration every 13.7 hours of operation on average. Suppose that a shop has six such machines, and they calibrate all of them at the end of the day on Friday and don't run them over the weekend. If the shop runs 10 hours a day during the week, what is the probability that two or fewer of the machines will need calibration before the shop closes on Monday?