ECO239 (2) Quiz 5 Dec. 26. 2017

ID/Name

1. At a chocolate factory, the amounts which go into packages of chocolates are supposed to be normally distributed with mean 100 g and standard deviation 2 g. Once every 30 minutes a package is selected from the production line, and its contents are noted precisely. If the amount of chocolate in the package is below 97 g or above 102g, then the package fails the quality control inspection.

(a) What percentage of the package **pass** the inspection?

(b) What is the cutoff point for the lowest 5 percent of the weight of the chocolate packages?

2. Merih knows that 60% of his 3-point shots are successful in basketball. If he attempts 100 shots, what is the probability that between 52 and 58 shots enter the basket?