

Math 1313 Online

Week 13

Popper 24(Wednesday's Lecture)

Instructions

- Homework will NOT be accepted through email or in person. Poppers must be submitted through CourseWare. BEFORE the deadline.
 - Submit the completed assignment at <http://www.casa.uh.edu> under "EMCF" and choose Popper 24.
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1. Do not ask on the discussion board, what was the answer to question 1 from Wednesday's lecture, so mark the same answer according to the video?
2. Do not ask on the discussion board, what was the answer to question 2 from Wednesday's lecture, so mark the same answer according to the video?
3. A light bulb at an art museum has an expected life of 300 hours and a standard deviation of 12 hours. Use Chebychev's Inequality to estimate the probability that one of these light bulbs will last between 280 and 320 hours of use.
 - a. 0.6400
 - b. 0.6000
 - c. 0.4000
 - d. 0.3600
4. Consider the following binomial experiment. A company owns 4 copiers. The probability that on a given day any one copier will break down is $\frac{23}{50}$. What is the probability that 2 copiers will break down on a given day?
 - a. 0.3702
 - b. 0.4576
 - c. 0.5805
 - d. 0.6102
5. Consider the following binomial experiment. The probability that a fuse produced by a certain company will be defective is $\frac{11}{50}$. If 500 fuses are produced each day, how many can we expect to find each day that are defective?
 - a. 107
 - b. 110
 - c. 112
 - d. 113