

MA 110-06  
§3.2 – 3.3

## Quiz #4

score

Name: \_\_\_\_\_

17 October 2002

1. In a roll of two dice, let  $E_1$  denote the event that the sum of the two dice is 8, and let  $E_2$  denote the event that at least one die has value 5. (5 points)

(a) Are  $E_1$  and  $E_2$  mutually exclusive? Explain.

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(b) Find  $p(E_1 \cup E_2)$ .

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2. Find the probability that there is at least one six in a roll of three dice. (5 points)

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3. Three cards are selected at random from a standard deck of cards. Find the probability that all three cards are from the same suit. (5 points)

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4. If you play a lottery using the numbers 1 through 12 in which you select four numbers (all different), find the probability that you select exactly two of the winning numbers. (5 points)