

MA 110-06 §2.3 - 2.4	Quiz #3	score	Name: _____ 14 February 2003
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INSTRUCTIONS: Explain your counting arguments and calculate the numerical values.

1. From a group of 12 people

(a) in how many ways can a committee of 4 different people be selected? (2 points)

(b) in how many ways can a committee of 4 be selected with one of the 4 named as chair of the committee and another named co-chair? (3 points)

2. In how many ways can the 12 people be lined up in a row if 3 particular individuals must be lined up consecutively? (5 points)

3. From a bag of 12 pink and 8 red Valentine candies, in how many ways can 4 candies be selected so that 2 are red and 2 are pink? [Assume the candies are of slightly different shapes so we can tell them apart, but that the order of selection is not counted.] (5 points)

4. How many different 13-card hands (e.g., as in bridge) are possible from a standard deck of 52 cards? (5 points)