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Section 10.1
Probability Day 3 - HOMEWORK

1. Uh-oh! Tom didn't study for his quiz that has ten true-false questions. If he randomly guesses on all ten questions, what is the probability Tom earns a score of exactly $70 \%$ on the quiz?
2. If a shiny 2015 Lincoln penny is tossed 6 times, what is the probability of tossing:
a. No heads?
b. exactly 2 heads?

c. At least 2 heads?
3. The town of Mathemagicland includes 8 men and 7 women. If a 4 person committee is to be formed at random, what is the probability the committee includes 2 men and 2 women?
4. Given the integers 1 through 50 , what is the probability that an integer that ends in 5 is a multiple of 3 ?
5. A "stripped" deck of cards is made up of 24 cards - the $9,10, \mathrm{~J}, \mathrm{Q}, \mathrm{K}$, and Ace of each of the four suits. If a four card hand is dealt from a "stripped" deck, what is the probability the hand contains:
a. Only red cards?
b. Only hearts?

c. 3 red cards and 1 black card?
d. No face cards (J, Q, K)?
6. On her bookshelf, Lucy Reader has ten books: two mysteries, four romance novels, and four mathematics textbooks.
a. If Lucy selects one book, what is the probability that it is a math textbook?
b. If Lucy selects two books, what is the probability that they are both the same type?
c. If Lucy selects two books, what is the probability that neither is a math textbook?
