

Chapter 3: Homework Problems

Answer the following questions on sheets of paper that can be handed in for credit. Be sure your answers are legible and clearly labeled.

1. *Study Guide* problems 3.1-3.9, page 18.
2. Problem 3.14, page 68. Let the following notation define events $\{A\}$ and $\{B\}$: $A = \{\text{GI side effects with A}\}$ and $B = \{\text{GI side effects with B}\}$. Thus, $\Pr(A) = 0.1$ and $\Pr(B) = 0.2$. Hint: Write down all the formulas and rules that could apply to this problem. Choose the formula or rule that applies to this problem.
3. Problem 3.49, page 70. Assume that the probability of having a low birthweight infant depends on the length of gestation. Hint: Write down all the formulas and rules that could apply to this problem. Choose the formula or rule that applies to this problem.
4. Problem 3.52, pages 70-71. Hints: Define the events, including the one that you have been asked to find. Write down the probabilities for all events that were given in the introduction to this problem. Write down all the formulas and rules that could apply to this problem. Choose the formula or rule that applies to this problem.
5. *Study Guide* problems 3.28 and 3.29, pages 19 and

What is the probability that a 55-year-old disease-free male will not develop colon cancer over the next year?

What is the probability that a 55-year-old disease free male will develop colon cancer over the next five years?