

Homework 5, Stat/Ma 320 Fall 2004

Due Sept. 30

First midterm exam will be on October 7

1. problem 2 on page 150. Assume the coin is fair.
2. problem 14 on page 152.
3. problem 5 (a) only, on page 150. Assume the coin is fair.
4. Refer to the table 4.6 on page 156. The table lists all the ω 's and its probabilities. For example $\omega_1 = \{X = -1, \text{ and } Y = -1\}$ and it has probability 0; $\omega_2 = \{X = -1, \text{ and } Y = 0\}$ and it has probability $1/36$, etc.

Are the events $A = \{X = 1\}$ independent of $B = \{Y = 2\}$? Why or why not?

5. problem 24 on page 153. To make it simpler, you can assume $n = 3$ and change “any specified trial” to “first trial”.