

EAS 595 PROB HW 1

DUE WEDNESDAY SEP 12, 11:59 P.M.

1. BOOK PROBLEMS [80%]

- (1) Section 1.3 Problems 14, 15, 18
- (2) Section 1.4 Problems 20, 22, 26, 27
- (3) Section 1.5 Problems 30, 31, 33, 38
- (4) Section 1.6 Problems 51, 60

2. OTHER QUESTIONS [20%]

- (1) Give two examples of sample spaces, events, probability laws, disjoint and independent events.
- (2) Suppose 30% of a club are above 25 years old (M), 50% are between 21 and 25 (W) and 20% are below 21 (L). If all are exposed to a virus but only 65% of M, 82% of W and 50% of L get the virus. We select a person at random and they have the virus. What is the probability they are aged between 21 and 25?

Note that solutions to many HW problems in text are online at http://www.athenasc.com/prob-solved_2ndedition.pdf