Problem Set 5

Exercise	Modification or comments
5.8	Fully explain why or why not
5.10ab	Change the numbers in the second row of the table to .09, .17, .25, .18, .17, .09, and .05
5.10cd	Same change as for parts a and b
5.10e	Same change as for parts a and b
5.14a	Change the numbers in the second row of the table to 138, 982, 654, 512, and 214 (they still total 2500)
5.14c, i and ii	Same change as in part a
5.18	Change 30% to 27%. Express probabilities as decimal numbers between 0 and 1, rounded to two decimal places. *Be sure to use a tree diagram in your solution.*
5.20	Change to 2 lefthanded people out of 15 people in all. Express probabilities as decimal numbers between 0 and 1, rounded to two decimal places. *Use a tree diagram in your solution.*
5.26	Change the second row of numbers in the table to .43, .29, .10, .09, .06, and .03. Compute using the formulas on the formula sheet, not by merely inserting numbers into a calculator. *Interpret the value of the mean in the context of the problem.*

Tenth problem (put it last, with the letter *A* for "Additional" in the left margin). A one-year term life insurance policy for \$100 000 sold to a high-risk group has a premium of \$5941. If there is a 94.3% chance that a person in the group of insured individuals will survive one year, how much does the insurance company expect to gain on average per policy sold?