

Due Tuesday, Sept 11

Solve the following problems and staple your solutions to this cover sheet.

1. Exercise 1.2
2. Exercise 1.5
3. Exercise 1.7
4. Exercise 1.12
5. Exercise 2.4
6. Exercise 2.7
7. Exercise 2.9
8. The amount of water put in bottles is normally distributed with a mean of ten ounces and a standard deviation of one ounce. About what percent of the bottles will contain between nine and eleven ounces of water?
9. Use *Mathematica* to find the sample mean, variance and standard deviation of the sample space  $\{1, 2, 3, 3, 4, 10\}$ . Note: See the example in the back. Attach your print out as the solution.
10. Use *Mathematica* to construct a relative frequency histogram for the following data. Use at least 4 subintervals.

$\{87, 109, 79, 80, 96, 95, 90, 96, 98, 101, 91, 78, 112, 94, 98, 94, 107, 81, 96\}$

Note: See the back. Write your work on the print out and attach it.