HOMEWORK THOUGHTS: A large part of this course is learning how to interpret and communicate results. That is, an isolated p-value will not ever be a complete answer to a question. As stated below, please always explain your answers in a sentence or two (unless, of course, the problem is truly just computational).

1. Section 6.1: 3, 6

2. Section 6.2: 1, 3, + Looney-Gulledge ; Compare the results for the 3 tests

3. Section 6.3: 2 (and do a Wilcoxon-Rank Sum test: compare your results); problem 2

4. Consider the Kolmogorov statistic (one-sample test). With $S(x)$ and $F^*(x)$ both plotted against x, justify that the largest vertical distance between the two curves can be expressed by:

$$
\begin{aligned}
D &= \max_{i=1,\ldots,n} M_i \\
M_i &= \max\left\{ \left| \frac{i}{n} - F^*(X^{(i)}) \right|, \left| \frac{(i-1)}{n} - F^*(X^{(i)}) \right| \right\}
\end{aligned}
$$