Goals for the day:

1. Words: Coefficient of determination, variation “explained” by the model, correlation
2. R: \texttt{lm, residuals}
3. Big idea: various ways to measure “goodness of fit”.

Tires

\texttt{ex2_2_12} in the Navidi package gives measurements of the hardness (in durometers) for tire treads containing various percentages of recycled rubber. The variables are \texttt{Percent} and \texttt{Hardness}.

Rust

\texttt{corrosion} in the M241 package gives the loss (\texttt{loss}) in material (in gm/dm\textsuperscript{2}) for alloys with various percentages of iron content (\texttt{Fe}).

GPAs

The dataframe \texttt{sr} in the M241 package gives test scores and GPAs of all Calvin seniors (in Spring 2007). The variables of interest are \texttt{ACT} and \texttt{GPA}.

Cars

The builtin dataframe \texttt{cars} gives the stopping distance in feet given the speed in MPH of certain cars. (The experiment was done in the 20s!) The variables are \texttt{speed} and \texttt{dist}.