/* 
We look to obtain a mean estimate and prediction for a predictor value not in the data. Because we don’t want to modify the ma2612.fuel data, we first create a temporary data set to contain all the data:
 */
data fuel;
set ma2612.fuel;
run;
/*
We now create a temporary data set with a new observation containing the desired value of the predictor. Notice that we set the response, F_CONS, to missing.
 */
data newfuel;
F_CONS=.; E_RATIO=1.10;
E_5=E_RATIO**5;
run;
/*
Now we append the new observation to the original data.
 */
proc append base=fuel data=newfuel;
run;
/*
And now run the regression with the clm (estimate of mean response) and cli (prediction) options.
 */
proc reg data=fuel;
model F_CONS=E_5/clb clm cli alpha=.05;
run;