Welcome to sTEm at Work! We are starting this column in the FLATE Focus as the beginning of our grass roots effort to change STEM to “sTEm” because we think that most people outside our community do not really make any effort to connect Technology and Engineering to the science and math part of STEM. On occasion, we will use this space as a “Bully Pulpit” but every month we will provide a visual challenge that hopefully suggests how math and science do connect to technology and engineering. This is an experiment for us but we hope it will be of use to our friends in science and math education and we also hope our technical readership will adapt each of our examples into other applications and share those with us. But for now, let us begin.

This time your technical position is that of an energy auditor. You performed a household equipment energy audit test procedure on the residence of B.J. Moose while B.J. was overseas and the data is provided below. Upon returning from Stockholm Sweden again disappointed that he did not win any of the prizes, he is wondering if his home is an energy winner. (We will provide some points for discussion in the next issue but in the mean time, how about sending us the answer (yes or no) you would give to Mr. Moose?)

Energy Audit Raw Data for B.J. Moose Residence

For an equivalent sized energy efficient home, an average of $10.6 \times 10^6$ Joules of energy are consumed during the test procedure period of time reported below.

Should you recommend that this home be retrofitted for energy conservation?

Yes  No