Homework Set 2

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1. I can see two advantages to continuing to use the English system of units in industry in the US. First, it is the system that is known best by manufacturers, construction industries, etc. in this country so it would require reeducation to switch to metric. Second, most factories use Imperial measurements for their tools and programming for automated manufacturing, so it would be very costly to convert everything to metric.
2. The advantage is that every man always has the tool required to measure using that measurement (since it’s their hand). The disadvantage is that it is not a precise system of measurement because there is variation from person to person in the width of their hand.
3. 9 \* 15 = 135 inches 135 / 12 = 11.25 feet
4. 106 mm / 10 = 10.6 cm / 100 = .106 m
5. 9.40 kg \* 100 = 940 g
6. 5280 ft \* .305 = 1610.4 m / 1000 = 1.6104 km
7. 55 mph \* 1.6104 kph = 88.572 kph, so no you are not speeding.
8. If the area increases by a factor of 9, then the sides increase by a factor of 3.