

ME318L - surprise miniquiz

1. Write the appropriate SI units for: power, electrical resistance, acceleration, absolute temperature. Which ones are base and which are derived?
2. Write the appropriate multiplying factor corresponding to prefixes: giga, milli, centi. (Example: the multiplying factor for prefix nano is 10^{-9} .)
3. Write the answer with the correct number of significant digits: $a + b - c = ?$, where $a = 26.1$, $b = 1.051 \times 10^2$ and $c = 0.04$.
4. Given a sample of N experimental measurements $x_1, x_2 \dots x_N$, write the expression for the mean of the sample \bar{x} :
5. For the sample and mean described in the previous problem, write the expression for the sample standard deviation S_x :