

AME 20231

Homework 2

Due: Thursday, 20 January 2022, 9:00 AM, on Sakai

1. 1.32, instead take the gas to be  $O_2$ .
2. 1.45, instead let the net pull be 9000 kN.
3. 1.58, instead let the top of building pressure be 746 mm Hg.
4. 1.75, instead let the width be 4.5 m.
5. Write and execute a program to list corresponding temperatures in  $^{\circ}C$ , K, F and R from  $-50^{\circ}C$  to  $100^{\circ}C$  in increments of 10 degrees. Use *any* language or application with which you are familiar (C, C++, MATLAB, Mathematica, Fortran, Python, VBA, Ada, Cobol, Pascal, Basic,...). Include your source code in your homework submission. Write your code so that it can handle an arbitrary temperature increment, not just a temperature increment of 10 degrees. This will likely require that you use a loop in your program. Paste a single computer-generated sample plot of your output to your homework. Be sure to label your axes and include units on your axes. Be sure that the plot is elegantly prepared.