

Assignment 9
Due 11/02/2021

Application Problem 1

Using your heat exchanger that you have created, create a control variable to monitor the total heat transfer through the pipe walls from the tubes into the shell. Run this deck with your transient that models a break in the shell and stops flow through the tubes. Plot the total heat transfer through the pipe walls with respect to temperature and explain your plot (does it make sense, any strange phenomena, etc.). Choose a specific time in your problem where heat transfer is not 0 and verify the value calculated from the code by performing hand calculations.