

MEAM 333: Heat and Mass Transfer

Assignment 1

100 points

Due Date: 1/19/2012

Homework Guidelines:

- All papers must be stapled (No dog eared pages!).
- Handwriting should be neat and presentation should be professional.
- Final answers for each part should be boxed or double underlined.
- Failure to do the above will result in point deductions.

Problem 1

What are the three modes of heat transfer?

Problem 2

Write down the equation for Fourier's law. Which mode of heat transfer does this law apply to?

Problem 3

Write down the equation for Newton's law of cooling. Which mode of heat transfer does this law apply to?

Problem 4

Write down the equation for the Stefan-Boltzmann law. Which mode of heat transfer does this law apply to?

[\[Solution\]](#)