## MEMS 0051 - Introduction to Thermodynamics Quiz #3

Name:	

## Problem #1

Determine the polytropic index for a process where  $0.25~[\mathrm{kg}]$  of air, initially at  $25~^{\circ}\mathrm{C}$  and  $150~[\mathrm{kPa}]$ , reaches a final state where the volume is double the initial and the temperature is three times higher than the initial.