

ME 201

Thermodynamics

Homework #21, Due Friday, April 21, 2006

1. Consider a jet aircraft flying at 300 m/s at an altitude of 3,000 m (use Table A-16 in the text to determine the pressure and temperature). The jet operates with a simple, ideal turbojet engine. The burner of the engine operates at 1300 kPa and 1800 K. Determine
 - a. specific thrust produced
 - b. propulsive efficiency