

ME 201

Thermodynamics

Unit Manipulation Practice Problems

Perform the following unit manipulations.

- a. A jet engine provides a thrust (force) of 2,000 lb_f with a velocity of 600 km/hr. What is the power produced in horsepower?
- b. What is the potential energy (in kJ) of a 1.25 ton aircraft at an elevation of 50,000 ft?
- c. Determine the kinetic energy (in BTU) of a 0.50g baseball thrown at 97 mph.