THERMODYNAMICS I REVIEW SHEET

Energy Balance – Closed Systems

Energy Rate Balance – Closed

Energy Rate Balance – Steady State

Energy Balance – Power Cycle

Thermal Efficiency – Power Cycle

Energy Balance – Refrigeration/Heat Pump Cycle

Coefficient of Performance – Refrigeration

Coefficient of Performance – Heat Pump

Closed System Entropy Balance

Steady State Control Volume Entropy Rate Balance

Ideal Gas Relations – Constant Specific Heat ratio, k, s1=s2

Ideal Gas Relation for Entropy – Constant Specific Heat

Isentropic Efficiency

Compressor & Pump

Turbine

Saturation Table – Property Relationship (use for v, u, h, & s)

Tds Relations