## Purdue University School of Civil Engineering

## **CE 361 – TRANSPORTATION ENGINEERING**

## Assignment 1

Problem	Answer
2.6	9%
2.8	8.7 ft/s <sup>2</sup>
2.9	158.7 mi/h Hint: use problem 2.8's torque equation to develop a power equation. Find $n_e$ at maximum power with $dP/dn_e=0$
2.13	13.25 ft/s <sup>2</sup> 15.06 ft/s <sup>2</sup>
2.25	43.27 mi/h
2.33	1.97s, 3.15s
2.35	242.9 lb