

Name _____

Homework Assignment #5 due in class Wednesday, October 4

Cover sheet : Staple this page in front of your solutions.

Write the *answers* (without calculations) on this page;

write the detailed *solutions* (written clearly) on your own paper.

[21] Problem 3.4.** *Answer: Suppose $M_{\text{cart}} = 3 m_{\text{hobo}}$.*

Then the ratio $v_{\text{final}}(b) / v_{\text{final}}(a)$ is ...

[22] Problem 3.5.** *(There is no answer to report here.)*

[23] Problem 3.6.* *Answer: the thrust, in tons, is ...*

[24] Problem 3.10.* *Answer: the mass such that p is maximum is ...*

[25] Problem 3.12.** *Answer: the final speed for the two-stage rocket is ...*

[26] Problem 3.13.** *The height at $t = 120$ s is ...*
