

Name_____

Homework Assignment #5

due in class Friday, October 7

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

Write the *answers* (without calculations) on this page;
write the detailed *solutions* 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 when 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 ...*
