

LAB #6

FORMULA TRANSLATION

Ted Pawlicki

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This lab should be completed during the scheduled lab sessions. In order to complete this lab you must demonstrate programs to your lab TA. The technical knowledge on how to accomplish these tasks is found in the assigned reading or the lecture notes, but the lab TA will help as well.

The BlueJ IDE will be appropriate for this assignment, but it is not required.

- Write JAVA methods for the following four mathematical expressions. For the first two, test your methods using console input. For the second two, test your methods using popup prompts for input. (Note, if there are difficulties viewing the text, please refer to exercise R3.1 of Horstmann.)

$$s = s_0 + s_0 t + \frac{1}{2} g t^2$$

$$G = 4\pi^2 \frac{a^3}{P^2 m_1 m_2}$$

$$\text{FutureValue} = \text{PresentValue} \left[1 + \frac{\text{interestRate}^{\text{years}}}{100} \right]$$

$$c = \sqrt{a^2 + b^2 - 2ab \cos \theta}$$

- Cut and paste your source code and screen shots of your running program into your lab document and hand it in. If you use electronic hand in, be sure to demo your running code to your TA so that the TA has a record of "checking you off" as having done this lab.

NOTE: Electronic hand in should be working at this point. Attempt to submit your lab work through the homework drop box in WebCT. However, we should view

this as a test. If you encounter any problems, revert to paper based hand in.