

PHYS 2210 Fall 2010 Homework Set 13

Due at **9:30 AM** on **December 9th, 2010**
Show your work!

1. (6 pts) Turn in the Mathematica exercises in-class on December 2nd and 7th.
2. (1 pt) We mentioned in class that the first few Legendre polynomials are

$$\begin{aligned}P_0(x) &= 1 \\P_1(x) &= x \\P_2(x) &= \frac{1}{2}(3x^2 - 1)\end{aligned}$$

Use the recursion relation to find $P_3(x)$ and $P_4(x)$. You must show all work to receive any credit.

3. (3 pt) Boas 13.7.4
4. (**1 point Extra credit**) Share your thoughts on some of the specific aspects of this course by completing a survey that is being prepared by Dr. Rachel Pepper at

http://www.colorado.edu/sei/surveys/Fall10/Clicker_Phys2210_fa10-post.html

The survey will not be ready until December 7th. So please complete the survey between December 7th and 10th.