

Math 2315 - Calculus II

Homework #18

Assigned - 2010.03.23

Due - 2010.03.29

Name: _____

Textbook problems:

Section 9.8 - 7, 8, 10, 11, 12, 13, 16, 18, 23, 24, 33, 36

Fun Problems:

Do Exploratory Exercise 1, also find $P_3(x)$.

Also, compute for $m = 0, 1, 2, 3$:

$$\int_{-1}^1 P_m(x) P_m(x) dx.$$

Can you find a formula for an arbitrary m ?

Graph $P_k(x)$ for $k = 0, 1, 2, 3$ on the same graph.