Physics 451: Homework #17

Due Thursday, Nov. 13, 5:00PM, 2008

Attend Colloquium on Wed. Nov. 12, 4PM.

4.21

4.22

(c) Note: $\int_0^{\pi} \sin^n \theta d\theta = \frac{n-1}{n} \int_0^{\pi} \sin^{n-2} \theta d\theta = \frac{(n-1)(n-3)...(4)(2)}{n(n-2)...(5)(3)} \int_0^{\pi} \sin\theta d\theta = 2\frac{(n-1)(n-3)...(4)(2)}{n(n-2)...(5)(3)}$,

assuming n is odd.

4.23

4.24