Homework #3

Due Wednesday, September 24, 2014

Reading. This week: Chaps 4 & 5. Next week: 5 & 6.

1. HRW Chap 4, P56.
2. HRW Chap 4, P61.

3. A purse at radius 2.00 m and a wallet at radius 3.00 m travel in uniform circular motion on the floor of a merry-go-round as the ride turns. They are on the same radial line. At one instant, the acceleration of the purse is $(2m/s^2)\hat{i} + (4m/s^2)\hat{j}$. At that instant and in unit-vector notation, what is the acceleration of the wallet?

4. HRW Chap 4, P67.
5. HRW Chap 5, P5.
6. HRW Chap 5, P25.
7. HRW Chap 5, P42.
8. HRW Chap 5, P51.
9. HRW Chap 5, P54.