

## Movie Recommendations

Name \_\_\_\_\_

Web Science

10 points

Use the following movie ratings to answer the questions below. Show *all* your work. You may use Excel or an online calculator to compute the Pearson's correlation coefficient.

	<b>Lady in the Water</b>	<b>Snakes on a Plane</b>	<b>Just My Luck</b>	<b>Superman Returns</b>	<b>You, Me and Dupree</b>	<b>The Night Listener</b>
Rose	2.5	3.5	3.0	3.5	2.5	3.0
Seymour	3.0	3.5	1.5	5.0	3.5	3.0
Puig		3.5	3.0	4.0	2.5	4.5
LaSalle	3.0	4.0	2.0	3.0	2.0	3.0
Matthews	3.0	4.0		5.0	3.5	3.0
Toby		4.5		4.0	1.0	

1. (4 pts) What rating is Matthews likely to give *Just My Luck*? Use all the critic's ratings to compute this value. Use Pearson's  $r$  as the similarity metric.
2. (3 pts) How similar are the ratings given to *Snakes on a Plane* to *You, Me and Dupree*? Use Pearson's  $r$  as the similarity metric. In general, what does this correlation mean about someone's opinions about these two movies?
3. (3 pts) Suppose a new critic named McLarty gave the movies above the following ratings (in the same order): 3.0, 3.0, 1.0, 4.5, 2.0, 3.0. How similar is McLarty to LaSalle if we used the modified Euclidian distance metric?