**CHEM525 Protein Denaturation Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. (10 points) For the following data, use the linear extrapolation method to determine the [Urea]1/2 of the unfolding reaction. You will need to make a plot of the Fraction of Unfolded Protein (fU) versus [Urea] from the data in order to answer the question. Your answer must include this plot and you must clearly label the [Urea]1/2  point on it.

|  |  |
| --- | --- |
| Urea (M) | Activity (A235/min) |
| 0.62 | 362 |
| 0.94 | 364 |
| 1.25 | 365 |
| 1.56 | 369 |
| 1.87 | 368 |
| 2.40 | 360 |
| 2.60 | 355 |
| 2.80 | 344 |
| 3.20 | 325 |
| 3.50 | 310 |
| 3.65 | 301 |
| 3.90 | 282 |
| 4.10 | 256 |
| 4.37 | 227 |
| 4.53 | 203 |
| 4.68 | 177 |
| 4.83 | 150 |
| 5.00 | 133 |
| 5.15 | 115 |
| 5.31 | 101 |
| 5.50 | 90 |
| 5.80 | 80 |
| 6.20 | 70 |
| 6.50 | 62 |
| 6.87 | 55 |
| 7.01 | 53 |
| 7.49 | 50 |
| 7.96 | 53 |
| 8.42 | 49 |