## Economics 312 Daily Problem \#7

We will use the same regression as in yesterday's daily problem.

| Source \| | SS | df | MS |  | $\begin{aligned} & \text { Number of obs } \\ & \text { F( } 2,4730) \\ & \text { Prob }>\text { F } \end{aligned}$ | $=4733$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $=161.43$ |
| Model \| | 11674.0923 | 2 | 5837.04616 |  |  | $=0.0000$ |
| Residual \| | 171032.322 | 4730 | 36.1590533 |  | R-squared | $=0.0639$ |
|  |  |  |  |  | Adj R-squared | $=0.0635$ |
| Total \| | 182706.415 | 4732 | 38.610823 |  | Root MSE | $=6.0132$ |
| wage \| | Coef. | Std. | Err. t | $P>\|t\|$ | [95\% Conf. | Interval] |
| exper \| | . 4434305 | . 0263 | 96916.80 | 0.000 | . 3916802 | . 4951808 |
| exper2 \| | -. 0087314 | . 000 | $614-14.22$ | 0.000 | -. 0099351 | -. 0075278 |
| _cons \| | 6.043945 | . 2466 | $821 \quad 24.50$ | 0.000 | 5.560334 | 6.527557 |

1. If the coefficient on the squared-experience term is zero, then the relationship between wage and experience is linear. Use the $t$-statistic and the reported confidence interval to assess how likely that result is in this dataset.
2. Constant terms in regressions often do not have meaningful interpretations, but this one does. What is the economic interpretation of the constant term? Based on the $t$-statistic and confidence interval reported in the table, what can you say about the wage-earners in the sample?
