

Economics 312
Daily Problem #5

Spring 2013
February 7

Suppose that you ran a quadratic regression of hourly wage on years of experience and got the following estimate: $wage = 10 + 0.02exper^2$.

1. What is the expected annual hourly wage of someone with 20 years of experience?
2. What do we expect the annual *raise* in hourly wage to be for with 20 years of experience? (Use the derivative of the wage function rather than re-calculating for 21 years and subtracting.)
3. What is the elasticity of hourly wage with respect to experience at 20 years?
4. What happens to the marginal effect of experience on wage, $d(wage) / d(exper)$, as workers get more experience? Is this realistic? If not, what alternative functional form might yield more realistic results?