Quizz on lecture 3

— How do you interpret the 0.083 in the following: $\widehat{\log(wage)} = 0.58 + 0.083\,educ$ (2pts)

— Fill in the blank: "A linear model means linear in ..." (2pts)

— How do you interpret the 8.4 in the following: $\widehat{lifeExp}_i = -9.1 + 8.4\log(gdpPercap_i)$ (2pts)

— How does the variance of the OLS estimator vary with sample size? (1pts)

— How can you check visually for heteroskedasticity? And for normality of the residuals? (3pts)

— **Bonus**: What is the formula for the (conditional) variance of the OLS estimator? Write it as a function of X and of an additional term (that you will need to define)