

Problems from Assignment 26

1. With the crying/IQ data I sent you compute the following:
 - (a) The p -value of test $H_0 : \beta_1 = 1$ vs $H_1 : \beta_1 > 1$. Note the excel command $tinv(\alpha, n)$ gives $t_{\alpha, n}$ cutoffs.
 - (b) 95% confidence interval for β_1
 - (c) 95% confidence interval for $E(Y|x = 30)$
 - (d) 95% prediction interval for Y when $x = 30$
 - (e) 95% confidence interval for σ^2
 - (f) 95% confidence interval for β_0
 - (g) R and R^2 . Compute R^2 the two different ways I gave you to see they are the same. What does R^2 tell you?