**Problem Set 3**

1.

The slope coefficient (*β2*) is approximately equal to 0.133. (*β2* ≈ 0.133) and it represents the expected variation on the dependent variable when the explanatory variable increases on one unit. It is statistically significantly different from zero (P-value≈ 0.000)

(*β2* ≈ 0.149). The result is different because now we have added a control variable, female. When controlling for sex we see that the effect of beauty on the score is even bigger than we first thought. The problem was that on the first regression we had an Omitted Variable Bias (OVB) we were comparing apples with oranges and on the second one we might have fixed the problem.

The coefficient of the interaction term (*β4*) can be interpreted as the different effect that additional beauty has on females relative to males. We can see that it is negative (*β4* ≈ -0.112) so we should expect a greater effect of additional beauty on males.

The coefficient of the controls for *minority, onecredit,* and *NNenglish* are statistically significant so we can say that those have a significant effect on teaching ratings. Control for all these variables have increased the coefficient of beauty