Problem Set for GV101 - Introduction to Political Science, 2018-19
(to be submitted in class in week 7)

Here are the results of two regression models of the effect of a range of factors on level of political activity. The research question was: Which social and economic resources help us to understand inequalities in political activity? The observations are 2,489 survey respondents in the United States.

	Model 1	*Model 2*
Constant	-1.14	-0.93
	(0.21)	(0.24)
Education	0.37**	0.24**
	(0.02)	(0.03)
Job Level	0.07**	0.00
	(0.02)	(0.02)
Family Income		0.07**
		(0.01)
Job Skills		0.12**
		(0.03)
Church Skills		0.19**
		(0.03)
Number of observations	2,489	2,415
R-squared	0.29	0.33

Note: * $\geq$ 95% significant, ** $\geq$ 99% significant.
Coefficients are followed by standard errors in parentheses.

The variables are defined as follows:

<u>Dependent variable</u>
Political Activity. This is a continuous measure of the number of political activities (such as contacting an elected representative, donating money to a party or campaign, or getting involved in a campaign) that the respondent got involved with in the last 12 months.

<u>Independent variables</u>
Education. This is a continuous variable indicating the level of educational qualification obtained by the respondent.

Job Level. This is a continuous variable indicating the self-assessed level of training and education required for the respondent's job.

Family Income. This is a continuous variable indicating the total annual income of the respondent's family (in $15,000 intervals).

Job Skills. This is a continuous variable indicating the number of specific skills (e.g. writing a formal letter, chairing a meeting, or giving a presentation) that the respondent uses in their job.

Church Skills. This is a continuous variable indicating the number of specific skills (like those outlined in *Job Skills*) that are used by the respondent in any voluntary activities that they undertake as part of a religious congregation.

Answer these questions (5 marks each). Answers should be only a few sentences long.

1. What is the estimated effect of an additional level of educational qualification on the number of political activities undertaken by respondents? Show your calculations based on Model 1.

2. What does the direction of the coefficient for family income indicate?

3. Does the main result from Model 1 change with the addition family income, job skills, and church skills in Model 2? What, if anything, does this suggest?

4. How does the simultaneous addition of family income and job skills in Model 2 affect our interpretation of the change in the coefficient for job level between Model 1 and Model 2?

5. What does the change in the size of the R-squared between Model 1 and Model 2 indicate? What could be causing this change?