3.

1.

a) a1 is expectedly negative (Law of demand for labor markets: wages are the price of labor services). The higher the wages the lower the demand for labor, *"ceteris Paribus". Latin phrase which means: all other things the same; all other things remain equal.*

b) For the case of Human capital (model below; it was done in class) we can have something like this:

Y = 2.45 + 0.7 edu + 0.8 exp

For example: 1 additional year of education explains a 0.7 % increase of the average income (all other things same). You want to isolate the effects, that's why CETERIS PARIBUS! (ONE EFFECT AT A TIME)

c) Error term (look the slides)

2.

$$y_i = a + b\ edu_i + c\ exp_i + u_i$$

a) Income is the dependent var. and edu and exp are the independent

b)

Y: people's annual income ($)

Education (Edu): no. of years of formal education; also, qualitative variables: for example, highest degree attained by people (e.g. doctorate, master, bachelor degrees, no formal education, etc.)

Experience (Exp): no. of years of job market experience; also, qualitative variable: for example: job category.

c) Expected sign of b and c are positive. It is a human capital model (Gary Becker): you have income and education and/or experience. The higher the latter two the higher the people's income.

d) Cross-sectional

3) A spurious regression is a regression with no meaning. For instance: Y is the stock exchange market index of NY and X is the amount of rain in Scotland. This is clearly wrong and we should think of using alternative X's (e.g. the interest rate, the oil price index, etc.)