Regression Analysis Assignment:

Economics of Wine

After watching <u>Economists in the Wild</u> featuring Orley Ashenfelter's research on how to buy wine, answer the questions below. Here is the <u>research paper</u>.

Questions 1-3 are related to the table below.

Table 2 – Regressions of the (Logarithm of) Price of Different Vintages of a Portfolio of Bordeaux Chateau Wines on Weather Variables

Independent Variables	(1)	(2)	(3)
	0.0354	0.0238	0.0240
Age of vintage	(0.0137)	(0.00717)	(0.00747)
Average temperature over growing		0.616	0.608
season (April-September)		(0.0952)	(0.116)
Rain in August		-0.00386	-0.00380
		(0.00081)	(0.000950)
Rain in the months preceding the		0.001173	0.00115
vintage (October-March)		(0.000482)	(0.000505)
Average temperature in September			0.00765
			(0.0565)
R^2	0.212	0.828	0.828
Root mean squared error	0.575	0.287	0.293

Notes: All regressions use as data the vintages of 1952-1980, excluding the 1954 and 1956 vintages, which are now rarely sold; all regressions contain an intercept, which is not reported.

Standard errors are in parentheses

- 1. According to the table above, what is true about the relationship between Bordeaux wine and rain in August?
 - a. Positively correlated, but statistically insignificant
 - b. Positively correlated, and statistically significant
 - c. Negatively correlated, but statistically insignificant
 - d. Negatively correlated, and statistically significant
- 2. According to the table above, which independent variable has the largest (statistically significant) effect on the price of Bordeaux wine?
 - a. Age of the vintage
 - b. Average temperature over the growing season (April-September)

- c. Rain in August
- d. Average temperature in September
- 3. According to the results from the **second equation**, with every additional year, the price of a vintage increases by
 - a. .024%
 - b. .048%
 - c. 2.4%
 - d. 4.8%