Name:______________________________________Student ID:_________________________

EE325 Section 1 Quiz 2 (Due date Feb 26, 2022)

Use 4 decimal places for numerical answers

Consumption-Income relationship in the United States, 1960-2005

$$\hat{Y}_t = -299.5913 + 0.7218X_t$$

$$Var(\hat{\beta}_1) = 827.4195. \qquad Var(\hat{\beta}_1) = 0.0000195$$

$$r^2 = 0.3698 \qquad \hat{\sigma}^2 = 73.56689$$

Note: $Y = personal\ consumption\ expenditure$ (Billions of dollars)

$X = GDP$ (Billions of dollars)

a) If we would like to estimate such relationship in millions-USD unit, what will happen to **all estimators**? Interpret the meaning. Show your work.

b) If we would like to estimate consumption in billions-USD unit and income in millions-USD unit, what will happen to **all estimators**? Interpret the meaning. Show your work.