

# Preclass Quiz

Wei Ye\*  
Econometrics 1

Due on September 1, 2021.

1. y is vertical.
2. a is intercept, and b is slope.
3. If  $T=35$ , x and y have 35 observations, respectively. Noise has 35 unobserved values. a and b as intercept and slope respectively have only one value.  
Error: I understand the error is the part that can't be explained by the linear relation between x and y. Because sometimes it's not included as independent variables or not observable in our dataset. But in some case, we also assume noise as white noise especially in time series.
4.  $lm(y \sim x, data = )$
5. False.
6. I will not say it's significant unless I add some conditions, like under which confidence interval, the t-value is significant.
7. This is an interesting question, because it's about 2. Actually 2 is a threshold for the test to autocorrelation. If it's exactly 2, then  $\rightarrow$  *zero autocorrelation*., if  $> 2 \rightarrow$  *negative autocorrelation*, and if  $< 2 \rightarrow$  *positive autocorrelation*.
8. Like what I said in question 2. We usually assume  $\epsilon \sim \mathcal{N}(0, \sigma^2)$ .
9. False.

---

\*Email: wye22@fordham.edu. The blue color text is what I am not certain. In order to assess my ability before the class accurately, I didn't look up information on the Internet.