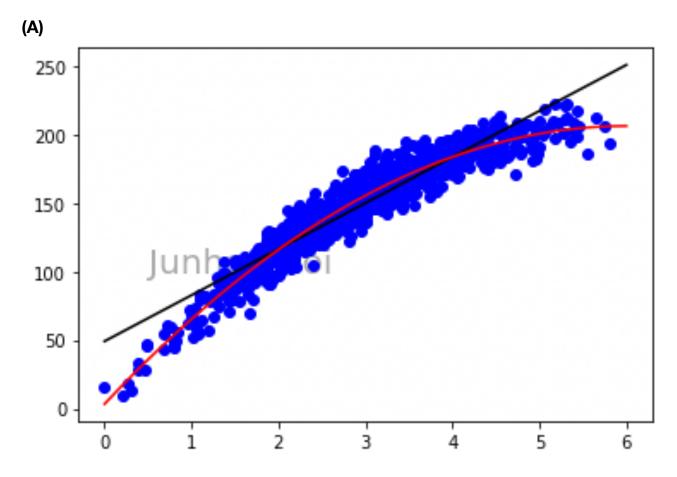
## jc8818



- **(B) 1)** The quadratic regression line will have lower bias as it is the more complex model and thus it best matches the sample data with less errors than the linear line.
- (B) 2) The linear line will most likely have a lower variance as it is a less complex model and is able to fit other new datasets with less error than the quadratic line.
- (B) 3) One method is by taking an unseen validation dataset taken from the original dataset. This can be used to judge the trade off between bias and variance for the model and evaluate the errors for the model. The regression that shows the least errors (calculated by least squares error metric or any other error metric) will be best for this particular training and validation dataset.