- 21 When implementing linear regression of some dependent variable y on the set of independent variables $\mathbf{x} = (x_1, ..., x_r)$, where r is the number of predictors, which of the following statements will be true?
 - a) $\beta_0, \beta_1, ..., \beta_r$ are the **regression coefficients**.
 - b) Linear regression is about determining the **best predicted weights** by using the **method of ordinary least squares**.
 - **C)** E is the random interval
 - d) Both and b

22)

What indicates that you have a **perfect fit** in linear regression?

- a) The value $R^2 < 1$, which corresponds to SSR = 0
- b) The value $R^2 = 0$, which corresponds to SSR = 1
- c) The value $R^2 > 0$, which corresponds to SSR = 1
- d) The value $R^2 = 1$, which corresponds to SSR = 0

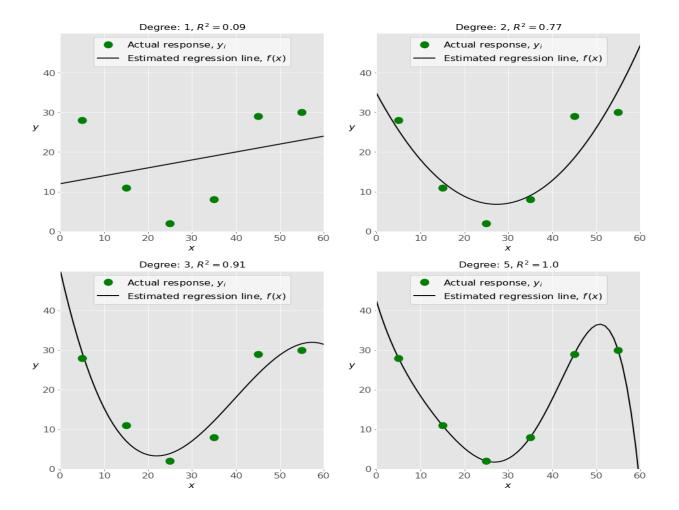
23)

In simple linear regression, the value of **what** shows the point where the estimated regression line crosses the *y* axis?

- a) Y
- b) B0
- c) B1
- d) F

24)

Check out these four linear regression plots:



Which one represents an underfitted model?

- a)The bottom-left plot
- b) The top-right plot
- c) The bottom-right plot
- d) The top-left plot

25)

There are five basic steps when you're implementing linear regression:

- a. Check the results of model fitting to know whether the model is satisfactory.
- **b.** Provide data to work with, and eventually do appropriate transformations.
- **c.** Apply the model for predictions.
- **d.** Import the packages and classes that you need.
- e. Create a regression model and fit it with existing data.

However, those steps are currently listed in the wrong order. What's the correct order?

a)	e, c, a, b, d
-	e, d, b, a, c
	d, e, c, b, a
d)	d, b, e, a, c
26) Wh	ich of the following are optional parameters to LinearRegression in scikit-learn?
a)	Fit
-	fit_intercept
	normalize
	copy_X n_jobs
	reshape
,	•
	the working with scikit-learn, in which type of regression do you need to transform the array of a include nonlinear terms such as x^2 ?
a)Multip	ple linear regression
b) Simp	le linear regression
c) Polynomial regression	
0	
28) You	should choose statsmodels over scikit-learn when:
A)You want graphical representations of your data.	
b) You'ı	re working with nonlinear terms.
c) You i	need more detailed results.
d) You need to include optional parameters.	
-,	
	is a fundamental package for scientific computing with Python. It offers
_	nensive mathematical functions, random number generators, linear algebra routines, Fourier
transfor	ms, and more. It provides a high-level syntax that makes it accessible and productive.
a) Panda	as as
b) Numj	ру
c) Statsr	model
d) scipy	
20.	
	is a Python data visualization library based on Matplotlib. It provides a high-level e for drawing attractive and informative statistical graphics that allow you to explore and
	and your data. It integrates closely with pandas data structures.

- a) Bokeh
- b) Seaborn
- c) Matplotlib
- d) Dash