Q1. If you have any, what are your choices for increasing the comparison between different figures on the same graph?

* Ans : Bar Graph. A bar graph should be used to avoid clutter when one data label is long or if you have more than 10 items to compare. ...
* Column Chart. ...
* Line Graph. ...
* Dual Axis Chart. ...
* Area Chart. ...
* Stacked Bar Chart. ...
* Mekko Chart. ...
* Pie Chart.

Q2. Can you explain the benefit of compound interest over a higher rate of interest that does not compound after reading this chapter?

Ans : Compound interest causes your wealth to grow faster. It makes a sum of money grow at a faster rate than simple interest because you will earn returns on the money you invest, as well as on returns at the end of every compounding period. This means that you don't have to put away as much money to reach your goals!

Q3. What is a histogram, exactly? Name a numpy method for creating such a graph.

Ans : Numpy has a built-in numpy. histogram() function which represents the frequency of data distribution in the graphical form. The rectangles having equal horizontal size corresponds to class interval called bin and variable height corresponding to the frequency.

Q4. If necessary, how do you change the aspect ratios between the X and Y axes?

Ans : The data aspect ratio is the relative length of the data units along the x-axis, y-axis, and z-axis. You can change the aspect ratio using the daspect function. Set the ratio as a three-element vector of positive values that represent the relative lengths of data units along each axis.

Q5. Compare and contrast the three types of array multiplication between two numpy arrays: dot product, outer product, and regular multiplication of two numpy arrays.

Ans : In short, the dot product is the sum of products of values in two same-sized vectors and the matrix multiplication is a matrix version of the dot product with two matrices.

Q6. Before you buy a home, which numpy function will you use to measure your monthly mortgage payment?

Ans : In order to calculate the monthly mortgage payment, you will use the numpy function . pmt(rate, nper, pv) where: rate = The periodic (monthly) interest rate. nper = The number of payment periods (months) in the lifespan of the mortgage loan.

Q7. Can string data be stored in numpy arrays? If so, list at least one restriction that applies to this data.

Ans : The elements of a NumPy array, or simply an array, are usually numbers, but can also be boolians, strings, or other objects.