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

I will choose different types of graphs for the same two figures so to get more insights about the figures.

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

Suppose I am having a coin of 10 rs. One option is that gives me interest of 10% compounding every month and other is giving me interest of 20% every month but without compounding. So, after 8 months we will be having more than 2 rs(20%) interest on option 1 which is only possible due to compounding. This is the major benefit of compounding.

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

Histogram is the representation of numerical data in the form of bars. Numpy.histogram is the method that is used for creating histogram.

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

We can do so by using command:

Ax=plt.gca()

Ax.set\_aspect(<value(s)>)

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.

Dot product is a regular matrix multiplication. Regular multiplication is where a number on mth row and nth column is multiplied with other matrix of same number row and column. Outer product is the multiplication of two matices but we take the transpose of the other matrix (other than one in inner matrix).

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

pmt() function is used to calculate the mortgage payment for the home

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

Yes strings can be stored in numpy arrays. Restriction to storing string in numpy array is that we have to remember the limitation on the size of the string to be stored in the numpy array.