

Distribution of Amir's Sales - Probability Distribution

Learn / Courses / Introduction to Statistics in Python

← Course Outline →

Daily XP 653

Exercise

Distribution of Amir's sales

Since each deal Amir worked on (both won and lost) was different, each was worth a different amount of money. These values are stored in the `amount` column of `amir_deals`. As part of Amir's performance review, you want to be able to estimate the probability of him selling different amounts, but before you can do this, you'll need to determine what kind of distribution the `amount` variable follows.

Both `pandas` as `pd` and `matplotlib.pyplot` as `plt` are loaded and `amir_deals` is available.

Instructions 2/2 50 XP 2

Question

Which probability distribution do the sales `amount`'s most closely follow?

Possible answers

☒ Uniform

☐ Binomial

☐ Normal

☐ None of the above

Submit Answer

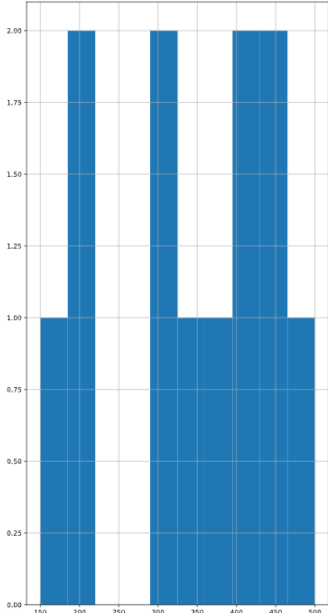
Take Hint (-15 XP)

script.py

1

Run Code

Plots



Amount Range	Probability
150-200	1.00
200-250	1.00
250-300	1.00
300-350	1.00
350-400	1.00
400-450	1.00
450-500	1.00

← Previous Plot 4/4 Next Plot →

IPython Shell

Slides

In [1]:

Question:

Which probability distribution do the sales 'amount' most closely follow?

Possible answers:

- Uniform
- Binomial
- Normal
- None of the above

Explanation of the Question:

This question involves analyzing the distribution of Amir's sales amounts based on the histogram. The objective is to match the pattern in the histogram with one of the provided probability distributions.

Answer:

The distribution most closely resembles a **Normal** distribution.

Explanation: A normal distribution has a bell-shaped curve where most data points cluster around the mean. The histogram provided shows a concentration of sales amounts in the middle ranges, tapering off at the extremes, indicating a normal distribution.

Explanation of the Answer:

The histogram indicates that the sales amounts are not evenly distributed but rather cluster around a central value, with fewer amounts at the lower and higher extremes. This is characteristic of a normal distribution, where data is symmetrically distributed around the mean.