

VITAL MATHEMATICS



STATISTICS
FREQUENCY MEAN

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INTRODUCTION

The frequency mean is the mean of a frequency distribution table. The frequency mean is always an estimate of the mean.

➤ Frequency Distribution Table

Speed (mph)	Frequency (f)
0 – 10	11
11 – 20	14
21 – 30	3
31 – 40	4
41 – 50	2

FREQUENCY MEAN EQUATION

$$\bar{x} = \frac{\Sigma(f \times x)}{\Sigma f}$$

\bar{x} (x – bar) – Sample mean

Σ (Sigma) – Summation

x – Midpoint of class

f – Frequency

SOLVING FREQUENCY MEAN

$$\bar{x} = \frac{\Sigma(f \times x)}{\Sigma f}$$

STEP 1) Calculate all midpoint for each class. Which becomes all the x values

STEP 2) Multiply the x values from STEP 1 by the corresponding frequency (f)

STEP 3) Add each value together from STEP 2

STEP 4) Identify total frequency, by add each f from each class together.

STEP 5) Divide STEP 3 by STEP 4

$$\text{Example: } \frac{\text{STEP 3}}{\text{STEP 4}}$$

STEP 6) Round Answer

STEP 7) Provide Conclusion

FREQUENCY MEAN EXAMPLE

Example 1: Find the frequency mean of the frequency distribution chart below:

Speed (mph)	f
0 – 10	11
11 – 20	14
21 – 30	3
31 – 40	4
41 – 50	2

Example 2) Find the frequency mean of the frequency distribution chart below:

Speed (mph)	f
0 – 100	25
101 – 200	74
201 – 300	14
301 – 400	36
401 – 500	52

Concepts Concerning the Frequency Mean

The Accuracy of frequency mean is not good for precision, because for each x value from the class midpoint is used to represent a range of numbers. The

Frequency mean is always an estimated guess of the frequency distribution table.



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