



Essential Math for Data Analysis Using Excel Online

Module 4, Lab 3: Average Revenue per User

Learning Objectives

- Calculate the average revenue per user.

Description

Learners will be given a small data set with a list of users of a fictitious app. They will calculate the average number of dollars spent by users within the app.

Data set

Mod4Lab3.csv

Overview

A list of users of a new farming simulator app shows the number of dollars spent by each user within the app. (Carrot seeds aren't cheap, after all.) In this lab, we'll find the average amount of money spent by each user from this sample.

What You'll Need

To complete the lab, you will need the online version of Microsoft Excel.

Exercise 1: Find the Average Revenue

1. Open the data set in Excel. Here's what the data look like:

	A	B
1	userid	revenue
2	55012	1
3	37544	5
4	83486	3
5	32501	4
6	13582	6
7	27761	7
8	23146	1
9	19344	8
10	70366	3
11	16405	2
12	12646	3
13	96675	7
14	14792	4
15	80586	4
16	22153	3
17	78616	1
18	19014	2
19	50621	10
20	38003	2
21	25331	5
22	80454	1
23	21192	5
24	88838	4
25	68562	9
26	14720	6
27	24413	9
28	36768	3
29	74615	1
30	29909	3
31	89498	4

- What is the average revenue per user? The average revenue is the total revenue divided by the number of users.

$$\text{average revenue} = \frac{\text{total revenue}}{\text{number of users}}$$

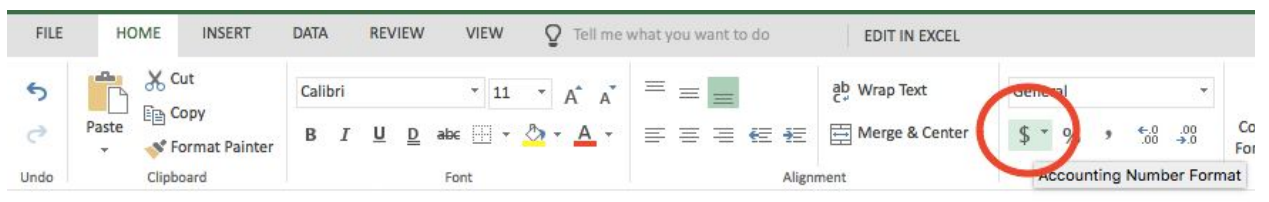
Once again, that's the same thing as the mean. In sigma notation with x = revenue and n = number of users, the formula looks like this:

$$\text{average revenue} = \frac{\sum(x)}{n}$$

- You've been getting a lot of mileage out of the AVERAGE function, so let's fire it up again. Create a new column and type in **=AVERAGE(B2:B31)**.

fx =AVERAGE(B2:B31)			
	A	B	C
1	userid	revenue	avg revenue
2	55012	1	4.2
3	37544	5	
4	83486	3	
5	32501	4	

- While you're at it, you may as well format the cell as a dollar amount. Do this by clicking the Home tab in the ribbon, clicking the dollar sign icon, and selecting dollars from the dropdown menu.



	A	B	C
1	userid	revenue	avg revenue
2	55012	1	\$ 4.20
3	37544	5	
4	83486	3	
5	32501	4	

The users of the app spent an average of \$4.20 per person on in-game purchases.