



Essential Math for Data Analysis Using Excel Online

Module 4, Lab 1: Time to Market

Learning Objectives

- Calculate the average time to market in Excel.

Description

Learners will be given a small data set with a list of product IDs and time to market for each. They will then calculate the average time to market.

Data set

Mod4Lab1.csv

Overview

In this lab, we'll calculate the average time to market for a line of products.

What You'll Need

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

Exercise 1: Find the Average Time to Market

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

	A	B
1	productID	timetomarket
2	RH2084E	7
3	NJ3706Y	7
4	BJ5721X	8
5	DJ9465X	6
6	CA2844Q	5
7	VF4760Q	7
8	XS4841Q	5
9	SA8687U	7
10	QQ8432E	8
11	HT8987P	8
12	RH2084E	8
13	NJ3706Y	6
14	BJ5721X	6
15	DJ9465X	7
16	CA2844Q	5
17	VF4760Q	7
18	XS4841Q	6
19	SA8687U	8
20	QQ8432E	6
21	HT8987P	7

- Set up a new column for the average time to market.

C1				fx	average
	A	B	C		
1	productID	timetomarket	average		
2	RH2084E	7			
3	NJ3706Y	7			
4	BJ5721X	8			
5	DJ9465X	6			
6	CA2844Q	5			
7	VF4760Q	7			
8	XS4841Q	5			
9	SA8687U	7			
10	QQ8432E	8			
11	HT8987P	8			
12	RH2084E	8			
13	NJ3706Y	6			
14	BJ5721X	6			
15	DJ9465X	7			
16	CA2844Q	5			
17	VF4760Q	7			
18	XS4841Q	6			
19	SA8687U	8			
20	QQ8432E	6			
21	HT8987P	7			
22					

- The average time to market is the sum of all the times to market divided by the number of products.

$$\text{average time to market} = \frac{\text{sum of times to market}}{\text{number of products}}$$

If x is the “time to market” variable and n is the number of products, the formula looks like this in sigma notation:

$$\text{average time to market} = \frac{\sum(x)}{n}$$

Look familiar? It’s the same thing as the mean formula, so go ahead and average the amount of time in column B using the AVERAGE function from B2 to B21.

C2				\times	\checkmark	f_x	=AVERAGE(B2:B21)
	A	B	C				
1	productID	timetomarket	average				
2	RH2084E	7	6.7				
3	NJ3706Y	7					
4	BJ5721X	8					
5	DJ9465X	6					
6	CA2844Q	5					
7	VF4760Q	7					
8	XS4841Q	5					
9	SA8687U	7					
10	QQ8432E	8					
11	HT8987P	8					
12	RH2084E	8					
13	NJ3706Y	6					
14	BJ5721X	6					
15	DJ9465X	7					
16	CA2844Q	5					
17	VF4760Q	7					
18	XS4841Q	6					
19	SA8687U	8					
20	QQ8432E	6					
21	HT8987P	7					

The average time to market for these products was 6.7.