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Working with formulas and functions

Sorting and filtering data

Apply range in Excel

Specialized functions

✓ **Video:** Function categories and syntax
6 min

✓ **Video:** Using specialized functions
2 min

📖 **Reading:** Exercise: Using specialized functions
10 min

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15 min

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10 min

Text functions

Logical functions

Exercise: Using specialized functions

Note: You can pass this course and all graded assessments without access to the downloadable version of Excel.

How to complete this exercise

To complete this exercise, you will need access to Microsoft 365 Excel.

Note: Keep in mind that if you are using free Office for the web or another version of the Microsoft 365 Excel application some features covered in this exercise may not be available.

Free Office for the web

If you do not have access to Microsoft 365 Excel, you can use Free Office for the web. This version of Office allows you to view and edit files in apps like Word, Excel, and PowerPoint. This free service is available to anyone with a Microsoft account.

Access Microsoft Account

[Log in to your Microsoft account.](#) Type the email, phone number, or Skype sign-in that you use for other services (Outlook, Office, etc.), then select Next. If you don't have a Microsoft account, you can select No account? Create one!

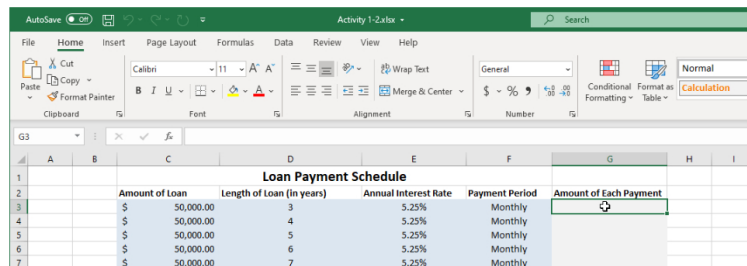
Let's get started!

You have a large worksheet that contains the details of dozens of loans. A payment rate for each loan must be calculated according to the terms that have been provided for each. You will use the PMT function and the Function Arguments dialog box to complete this task.

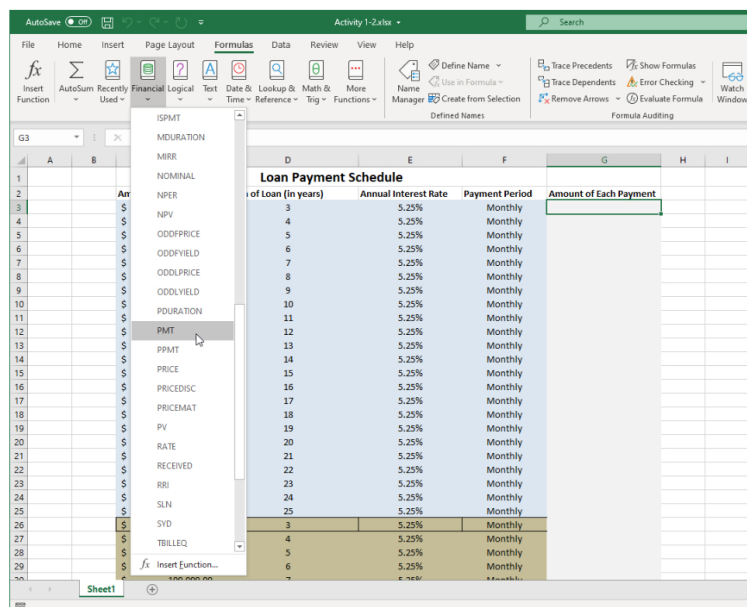
1. Click on the link below to open the Microsoft Excel exercise document you can use to complete this exercise.

[Exercise: Using Specialized Functions](#)

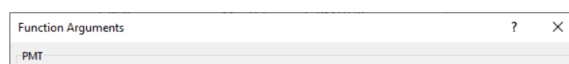
2. First, click to select cell **G3**:



3. Next, click **Formulas** → **Financial** → **PMT**:



4. The Function Arguments dialog box appears. Within this dialog box you need to enter all of the arguments. As the interest rate is stored in cell E3, type "E3" into the Rate text box:



Rate	E3	= 0.0525
Nper		= number
Pv		= number
Fv		= number
Type		= number

Calculates the payment for a loan based on constant payments and a constant interest rate.

Rate is the interest rate per period for the loan. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result =

[Help on this function](#) OK Cancel

5. As these are annual interest rates and the payments will be monthly, you need to divide this value by 12. Type “/12” following the cell reference in the Rate text box:

Rate	E3/12	= 0.004375
Nper		= number
Pv		= number
Fv		= number
Type		= number

Calculates the payment for a loan based on constant payments and a constant interest rate.

Rate is the interest rate per period for the loan. For example, use 6%/4 for quarterly payments at 6% APR.

Formula result =

[Help on this function](#) OK Cancel

6. The next argument is Nper, or the number of payment periods over the life of the loan. This information is contained in cell D3, but it is provided in years. Because you need to enter it as months, type “D3*12” into the Nper text box:

Rate	E3/12	= 0.004375
Nper	D3*12	= 36
Pv		= number
Fv		= number
Type		= number

Calculates the payment for a loan based on constant payments and a constant interest rate.

Nper is the total number of payments for the loan.

Formula result =

[Help on this function](#) OK Cancel

7. The next argument is Pv, or present value. This is the amount of money that is being borrowed. This information is contained in cell C3, so type “C3” into the Pv text box:

Rate	E3/12	= 0.004375
Nper	D3*12	= 36
Pv	C3	= 50000
Fv		= number
Type		= number

Calculates the payment for a loan based on constant payments and a constant interest rate.

Pv is the present value: the total amount that a series of future payments is worth now.

Formula result = -1504.163526

[Help on this function](#) OK Cancel

8. Leave the Fv (Future Value) argument field empty. This argument will default to 0, which is what we want. (This means there will be no part of the loan left outstanding at the end of the payments.) We will also let the Type field default to 0, meaning payments will be due at the end of the payment period. Click **OK** to create the function:

Rate	E3/12	= 0.004375
Nper	D3*12	= 36
Pv	C3	= 50000
Fv		= number
Type		= number

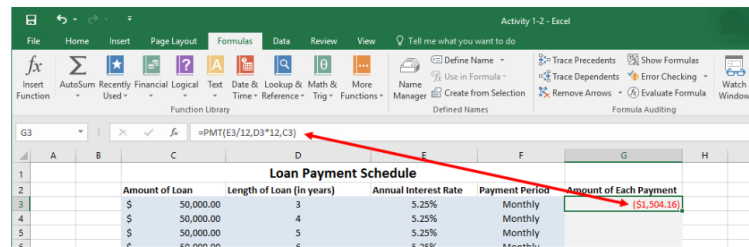
Calculates the payment for a loan based on constant payments and a constant interest rate.

Pv is the present value: the total amount that a series of future payments is worth now.

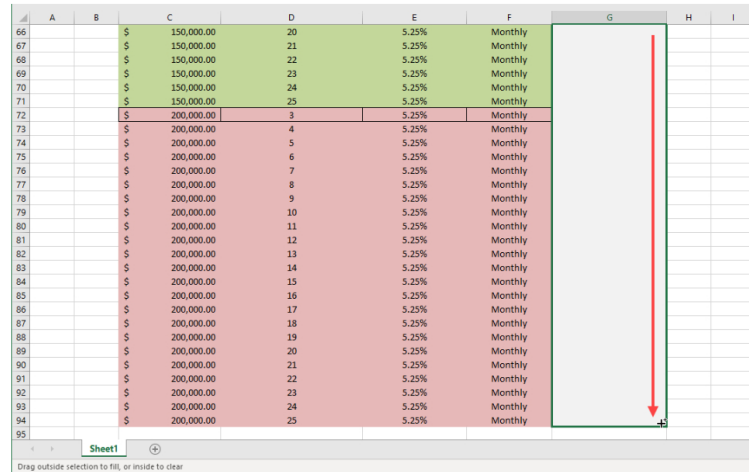
Formula result = -1504.163526

[Help on this function](#) OK Cancel

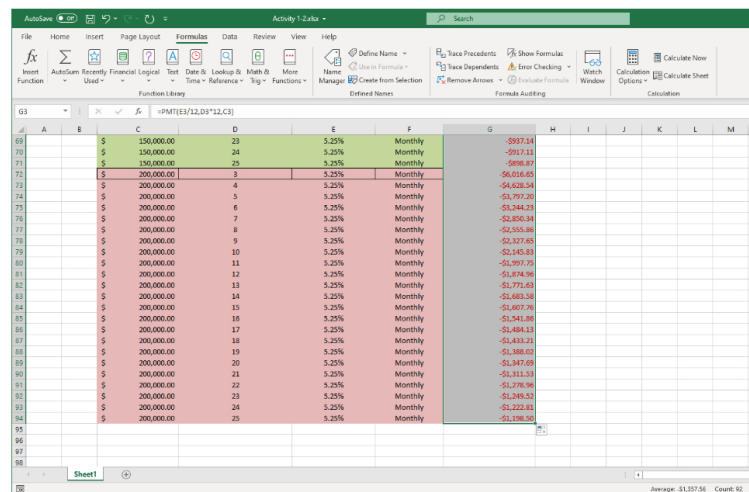
9. You now have a result in the cell G3. You will also see the PMT function in the Formula Bar:



10. Now it is time to enter this formula for the rest of the data rows. To do this, click cell **G3** to make it active, and then drag the AutoFill handle in the lower right corner of the cell down to **G94**:



11. Release the mouse button. You will see that the loan payments for each entry have been calculated:



12. Save the current workbook as Activity 1-2 Complete and then close Microsoft 365 Excel to complete this exercise.

13. Now, you can check out an example of a completed document in the link below:

[Completed exercise: Using Specialized Functions](#)

Mark as completed

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