

Fall 2015 Spreadsheet Lab

Assignment: Spreadsheet Application: Travel Loan Facility

Textbook: Valacich, Joseph S. and Schneider, Christoph. Information Systems Today: Managing in the Digital World. 6th Edition. Prentice Hall. ISBN: 9780132971218 (eText: 9780132971799).

Presentation Creator: Preuss

Presentation Date: 10/21/2015

Notes: This presentation shows most if not all the required steps in completing the assignment. It is the student's responsibility to read and understand the assignment to insure the assignment is correctly done.



The presentation starts Windows 10.

H4

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The presentation opens a blank spreadsheet.

Save As

<< cptr1138 > Lab07

Search Lab07

Organize | New folder

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- Desktop
- Documents
- Downloads
- Music
- Pictures
- Videos
- Local Disk (C:)
- data (\\brazil) (C)

Name	Date modified	Type
No items match your search.		

File name: campus\_travel\_trip\_options

Save as type: Excel Workbook (\*.xlsx)

Authors: Tim Preuss

Tags: Add a tag

Save Thumbnail

Hide Folders

Tools | Save | Cancel

The presentation gives the spreadsheet a name and saves the spreadsheet. This allows easy saving during the process.

Browse

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Campus Travel Trip Options															
2																
3		Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest								
4	2 Weeks Eastern Europe	2000		1	12											
5	2 Weeks Western Europe	3000		1	12											
6	3 Weeks Eastern Europe	3000		2	24											
7	3 Weeks Western Europe	3500		2	24											
8	4 Weeks Eastern Europe	4000		2	24											
9	4 Weeks Western Europe	5000		3	36											
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The presentation adds the labels and base data as shown.

campus\_travel\_trip\_options.xlsx - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard Font Alignment Number Styles Cells Editing

A1 Campus Travel Trip Options

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>Campus Travel Trip Options</b>															
2																
3		<u>Price</u>	<u>Rate</u>	<u>Time</u>	<u># Pymts</u>	<u>Payment</u>	<u>Total Paid</u>	<u>Total Interest</u>								
4	2 Weeks Eastern Europe	2000		1	12											
5	2 Weeks Western Europe	3000		1	12											
6	3 Weeks Eastern Europe	3000		2	24											
7	3 Weeks Western Europe	3500		2	24											
8	4 Weeks Eastern Europe	4000		2	24											
9	4 Weeks Western Europe	5000		3	36											
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The presentation formats the data titles as shown. This just makes the spreadsheet nicer.

Clipboard | Font (Calibri, 11) | Alignment | Number (General) | Styles (Conditional Formatting, Format as Table, Cell Styles) | Cells (Insert, Delete, Format) | Editing (Sort & Filter, Find & Select)

B4 : [X] [Y] [fx] 2000

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	<b>Campus Travel Trip Options</b>															
2																
3		<u>Price</u>	<u>Rate</u>	<u>Time</u>	<u># Pymts</u>	<u>Payment</u>	<u>Total Paid</u>	<u>Total Interest</u>								
4	2 Weeks Eastern Europe	2000		1	12											
5	2 Weeks Western Europe	3000		1	12											
6	3 Weeks Eastern Europe	3000		1	12											
7	3 Weeks Western Europe	3500		1	12											
8	4 Weeks Eastern Europe	4000		1	12											
9	4 Weeks Western Europe	5000		1	12											

Calibri 11 A A \$ % , [Alignment]

- Cut
- Copy
- Paste Options:
  - Paste
  - Paste Special...
  - Insert...
  - Delete...
  - Clear Contents
- Quick Analysis
- Filter
- Sort
- Insert Comment
- Format Cells...
- Pick From Drop-down List
- Define Name...
- Hyperlink...

The presentation selects the cells to format. Using the right click button, the menu appears. The presentation selects "Format Cells."

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Clipboard Font Alignment Number Styles Cells Editing

B4 : [X] [Y] [fx] 2000

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	2000		1	12		
5	2 Weeks Western Europe	3000		1	12		
6	3 Weeks Eastern Europe	3000		2	24		
7	3 Weeks Western Europe	2500		2	24		
8	4 Weeks Eastern Europe						
9	4 Weeks Western Europe						

Format Cells

Number Alignment Font Border Fill Protection

Category:

- General
- Number
- Currency
- Accounting
- Date
- Time
- Percentage
- Fraction
- Scientific
- Text
- Special
- Custom

Currency formats are used for... decimal points in a column.

OK Cancel

The presentation selects "Currency" as the number type for the cells.



Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	\$2,000.00		1	12		
5	2 Weeks Western Europe	\$3,000.00		1	12		
6	3 Weeks Eastern Europe	\$3,000.00		2	24		
7	3 Weeks Western Europe	\$3,500.00		2			
8	4 Weeks Eastern Europe	\$4,000.00					
9	4 Weeks Western Europe	\$5,000.00		3			

The presentation selects the cells to format. Using the right click button, the menu appears. The presentation selects "Format Cells."

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Clipboard Font Alignment Number Styles Cells Editing

C4

fx

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	\$2,000.00		1	12		
5	2 Weeks Western Europe	\$3,000.00		1	12		
6	3 Weeks Eastern Europe	\$3,000.00		2	24		
7	3 Weeks West	\$2,500.00		2	24		
8	4 Weeks Eastern Europe	\$4,000.00		1	12		
9	4 Weeks Western Europe	\$5,000.00		1	12		

Format Cells

Number Alignment Font Border Fill Protection

Category:

- General
- Number
- Currency
- Accounting
- Date
- Time
- Percentage
- Fraction
- Scientific
- Text
- Special
- Custom

Sample

Decimal places: 2

Percentage formats mult... t symbol.

OK Cancel

The presentation selects "Percentage" as the number type for the cells.

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Clipboard Font Alignment Number Styles Cells Editing

C10

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1			
5	2 Weeks Western Europe	\$3,000.00	6.00%				
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3			
10							

The presentation enters the requested percentages.

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Clipboard Font Alignment Number Styles Cells Editing

F4 : [Icons] =

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	=	
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12		
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24		
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24		
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24		
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36		

Insert Function

Search for a function: pmt

Or select a category: Recommended

Select a function: PMT, PV, FV, RATE, NPER

**PMT(rate,nper,pv,fv,type)**  
Calculates the payment for a loan based on constant payments and a constant interest rate.

Help on this function

OK Cancel

The presentation begins the "PMT" formula as shown.

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Clipboard Font Alignment Number Styles Cells Editing

PMT : [X] [✓] [fx] =PMT(C4/E4)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	<b>Campus Travel Trip Options</b>														
2															
3		<b>Price</b>	<b>Rate</b>	<b>Time</b>	<b># Pymts</b>	<b>Payment</b>	<b>Total Paid</b>	<b>Total Interest</b>							
4	<b>2 Weeks Eastern Europe</b>	\$2,000.00	5.50%	1	12	(C4/E4)									
5	<b>2 Weeks Western Europe</b>	\$3,000.00	6.00%	1	12										
6	<b>3 Weeks Eastern Europe</b>	\$3,000.00	6.50%	2	24										
7	<b>3 Weeks Western Europe</b>	\$3,500.00	5.50%	2	24										
8	<b>4 Weeks Eastern Europe</b>	\$4,000.00	6.00%	2	24										
9	<b>4 Weeks Western Europe</b>	\$5,000.00	6.50%	3	36										

The presentation enters the rate as shown.

Function Arguments

PMT

Rate C4/E4 = 0.004583333

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



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Clipboard Font Alignment Number Styles Cells Editing

PMT  $\times$   $\checkmark$   $fx$  =PMT(C4/E4,E4,B4)

Campus Travel Trip Options								
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest	
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	=PMT(C4/E4,B4)		
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The presentation enters the present value as shown.

Function Arguments

PMT

Rate C4/E4 = 0.004583333

Nper E4 = 12

Pv B4 = 2000

Fv = number

Type = number

= -171.6735691

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 = -171.6735691

[Help on this function](#)

OK Cancel

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Clipboard Font Alignment Number Styles Cells Editing

Formula Bar: **PMT**  $=PMT(C4/E4,E4,B4)$

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	<b>Campus Travel Trip Options</b>														
2															
3		<b>Price</b>	<b>Rate</b>	<b>Time</b>	<b># Pymts</b>	<b>Payment</b>	<b>Total Paid</b>	<b>Total Interest</b>							
4	<b>2 Weeks Eastern Europe</b>	\$2,000.00	5.50%	1	12	$=PMT(C4/E4,E4,B4)$									
5	<b>2 Weeks Western Europe</b>	\$3,000.00	6.00%	1	12										
6	<b>3 Weeks Eastern Europe</b>	\$3,000.00	6.50%	2	24										
7	<b>3 Weeks Western Europe</b>	\$3,500.00	5.50%	2	24										
8	<b>4 Weeks Eastern Europe</b>	\$4,000.00	6.00%	2	24										
9	<b>4 Weeks Western Europe</b>	\$5,000.00	6.50%	3	36										

The presentation does not enter anything for future value, as shown.

Function Arguments

**PMT**

Rate: C4/E4 = 0.004583333

Nper: E4 = 12

Pv: B4 = 2000

Fv: | = number

Type: | = number

= -171.6735691

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

**Fv** is the future value, or a cash balance you want to attain after the last payment is made, 0 (zero) if omitted.

Formula result = -171.6735691

[Help on this function](#)

OK Cancel



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Clipboard Font Alignment Number Styles Cells Editing

PMT : [Icons]  $=PMT(C4/E4,E4,B4,,0)$

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	<b>Campus Travel Trip Options</b>														
2															
3		<u>Price</u>	<u>Rate</u>	<u>Time</u>	<u># Pymts</u>	<u>Payment</u>	<u>Total Paid</u>	<u>Total Interest</u>							
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	$=PMT(C4/E4,E4,B4,,0)$									
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12										
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24										
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24										
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24										
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36										
10															
11															

The presentation indicates the payment is at the end fo the period, as shown.

Function Arguments

PMT

Rate	C4/E4	= 0.004583333
Nper	E4	= 12
Pv	B4	= 2000
Fv		= number
Type	0	= 0

= -171.6735691

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

**Type** is a logical value: payment at the beginning of the period = 1; payment at the end of the period = 0 or omitted.

Formula result = -171.6735691

[Help on this function](#)

OK Cancel

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FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard Font Alignment Number Styles Cells Editing

F4  $\text{fx}$  =PMT(C4/E4,E4,B4,,0)

Campus Travel Trip Options								
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest	
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	(\$171.67)		
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The presentation sees this is not correct.

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Clipboard Font Alignment Number Styles Cells Editing

PMT :  $\text{=PMT}(C4/E4,E4,B4,,0)*-1$

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12		
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12		
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24		
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24		
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24		
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36		

The presentation adds the multiplication to correct the calculation.

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard Font Alignment Number Styles Cells Editing

F4 =PMT(C4/E4,E4,B4,,0)\*-1

Campus Travel Trip Options								
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest	
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	\$171.67		
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The presentation calculation is correct.

Clipboard Font Alignment Number Styles Cells Editing

Font: 11, Bold, Italic, Underline, Paragraph, Styles

Alignment: Left, Center, Right, Indent, Decrease Indent, Increase Indent, Merge & Center, Unmerge Cells

Number: General, Currency (\$), Percentage (%), Thousand Separator (comma), Negative numbers (left), Zero (0), Positive numbers (right)

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: Sum, Sort & Filter, Find & Select

PMT :  $=F4 * E4$

Campus Travel Trip Options								
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest	
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	\$171.67	$=F4 * E4$	
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The presentation uses the formula shown to calculate the "Total Paid" value.

Clipboard Font Alignment Number Styles Cells Editing

Font: 11, A, A, B, I, U, A

Alignment: General, \$, %, , ←.0, .00, →.0

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: Sort & Filter, Find & Select

PMT :  $\times$   $\checkmark$   $fx$  =G4-B4

Campus Travel Trip Options								
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest	
4	2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	\$171.67	\$2,060.08	=G4-B4
5	2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
6	3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
7	3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
8	4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
9	4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The presentation uses the formula shown to calculate the "Total Interest" value.

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FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW

Clipboard Font Alignment Number Styles Cells Editing

H5

Campus Travel Trip Options							
	Price	Rate	Time	# Pymts	Payment	Total Paid	Total Interest
2 Weeks Eastern Europe	\$2,000.00	5.50%	1	12	\$171.67	\$2,060.08	\$60.08
2 Weeks Western Europe	\$3,000.00	6.00%	1	12			
3 Weeks Eastern Europe	\$3,000.00	6.50%	2	24			
3 Weeks Western Europe	\$3,500.00	5.50%	2	24			
4 Weeks Eastern Europe	\$4,000.00	6.00%	2	24			
4 Weeks Western Europe	\$5,000.00	6.50%	3	36			

The project needs a few finishing touches that are not shown.