BUS 140 Function Palettes and Notes

For all formulas: Do not use absolute references <u>unless</u> the formula is to be copied elsewhere.

<u>PMT</u> (use to find the monthly payment of a loan)

Rate		
Nper		
Pv		
Fv	LEAVE BLANK	
Type	LEAVE BLANK	

Rate: the cell displaying the <u>interest rate</u>
- If the interest rate is expressed in years (i.e., annual or yearly interest rate), use interest rate cell divided by 12.
  - If a cell already displays the number of payments per year (i.e., 12), divide interest rate by this cell reference rather than the actual number 12.
- If the interest rate is already expressed in months, use the interest rate cell only.

Nper: the cell displaying the <u>total number of payments</u> (or "periods")
- If term of loan is shown in years, multiply by 12 to give total number of monthly payments

PV: the cell displaying <u>present value of the principal</u> (i.e., starting amount financed/borrowed)
- Make this number negative if a positive result is required

FV and **Type**: Leave blank

Reminder note: *Do not use absolute references in any formula unless the formula is to be copied elsewhere.*

IF

Logical_test		
Value_if_true		
Value_if_false		

Logical Test:

Part I	Part II	Part III
Decision cell	**Comparison Operator**	**Match**
Cell you want compared	*Use one of: =,>, <, >=, <=*	*What you want IF to match*

Value_if_true: Whatever value, calculation, or comment you want Excel to enter in the cell if the function finds a match

Value_if_false: Whatever value, calculation, or comment you want Excel to enter in the cell if the function does NOT find a match

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VLOOKUP

Lookup_value		:
Table_array		:
Col_index_num		:
Range_lookup	LEAVE BLANK	:

Lookup_value: a single cell (never use a cell range) that has the compare value in it (the cell that you want Excel to compare to the lookup table

Table_array: Highlight the lookup table (without the headings) and
- make the range absolute; OR
- name the range first, then use the range name in this field

Col_index_num: the number of the lookup table column that has the value you want the function to place in the cell

Range_lookup: Leave blank

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PPMT (use to find the Principal portion of a monthly loan payment)

Rate	[ ]
Per	[ ]
Nper	[ ]
Pv	[ ]
Fv	LEAVE BLANK
Type	LEAVE BLANK

Fill in **Rate, Nper, Pv** exactly as you do in the **PMT function**

Per: is the payment (or "period") number (usually left as a relative reference)

Reminder note: *Do not use absolute references in any formula unless the formula is to be copied elsewhere.*

IPMT (use to find the Interest portion of a monthly loan payment)

Rate	
Per	
Nper	
Pv	
Fv	LEAVE BLANK
Type	LEAVE BLANK

Fill in **Rate, Nper, Pv** exactly as you do in the **PMT function**

Per: is the payment (or "period") number (usually left as a relative reference)

Reminder note: Do not use absolute references in any formula unless the formula is to be copied elsewhere.

CUMIPMT/CUMPRINC

Use CUMIPMT to find cumulative interest; use CUMPRINC to find cumulative principal. The palette looks the same for these functions.

Rate	
Nper	
Pv	
Start_period	
End_period	
Type	0

Fill in **Rate, Nper, Pv** as you do in the **PMT function.**
- **Note:** making Pv negative does not work in this function

Start_period: cell reference for the first payment number

End_period: cell reference for the final payment number

Type: type in a zero. You cannot leave the field blank in this function.
- Make sure to scroll down so that you can see the Type field.

To make **CUMIPMT** result **positive,** type in a **– sign** between the = and the C
(i.e. **=-CUMIPMT**)

CUMPRINC is filled in exactly as **CUMIPMT**

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