

Microsoft Excel: Advanced Topics

ACTIVITY #1

1. Open the **Market Orders** file
2. Select cells **E2:E74** (the Order Amount)
3. Use **Conditional Formatting** to highlight in green all the orders over \$100
4. Use **Conditional Formatting** to highlight in red all the orders less than \$10
5. Clear the Conditional Formatting rules

E
Order Amount
\$13.32
\$58.43
\$188.85
\$109.11
\$32.37
\$48.83
\$151.52
\$33.68

ACTIVITY #2

1. Open the **Budget** file. Determine which cells contain formulas.
2. Enter the word "Total" in cell E3.
3. Enter a formula in cell E4 to show the Total amount for Gasoline
4. Fill the formula in E4 down to the rest of the cells (down to cell E12)
5. Use **Conditional Formatting** to add Data Bars to the numbers in the Total Column (don't format the grand total)
6. Type "Percent of Total" in cell F3
7. In cell F4, create a formula to divide cell E4 by E12. Format cell F4 in the Percent format.
8. Modify the formula in F4, to make the reference to E12 an **absolute** reference.
9. Copy the formula down through F11.

	A	B	C	D	E	F
1	Our Budget					
2						
3		January	February	March	Total	% of Total
4	Gasoline	230	230	230	690	6%
5	Groceries	450	600	650	1,700	14%
6	Child Care	600	600	600	1,800	15%
7	Utilities	200	300	400	900	8%
8	Clothes	500	200	250	950	8%
9	Vacation	500	-	2,000	2,500	21%
10	Mortgage	1,000	1,000	1,000	3,000	26%
11	Entertainment	65	65	65	195	2%
12	Total	3,545	2,995	5,195	11,735	

ACTIVITY #3:

With the Budget file:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
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1. Change the color of each of the sheet tabs.

ACTIVITY #4:

With the Budget file:

1. Go to the **2nd Quarter** sheet. In cell G3, type "1st Quarter"
2. Enter a formula in cell G4 to display the value in cell E4 of the **1st Quarter** sheet.
3. Fill this formula down to cells G5:G11
4. Go to the **1st Quarter** sheet. Change the value of Groceries in January to 500. Note how the January total is changed. Go back to the **2nd Quarter** sheet and see the change there also.

Activity #5

1. Open the **Loan Calculator** file
2. Type the values for the Loan Amount, Length of Loan, and Annual Interest Rate as shown in the picture.
3. Look at the contents of cell B10. What is the formula used in cell B10?
4. Use the PMT function to create a formula in cell B11 to calculate the monthly payment.

	A	B
1	Loan Calculator	
2		
3	Loan Conditions	
4	Loan Amount	100,000
5	Length of Loan (in Years)	15
6	Annual Interest Rate	5.0%
7	Payments per Year	12
8		
9	Calculation Results	
10	Total Payments	180
11	Monthly Payment Amount	
12		

ACTIVITY #6

1. Open the **Vehicle Order Example** File.
2. Look at the Price List table on the right. This will be your Lookup table.
3. Click in cell D2.
4. Use VLOOKUP to determine look up the price in the Lookup table for the Vehicle ID in cell B2.
Hint: the Table Array will be \$J\$2:\$P\$73
5. Fill the formula down for the rest of the orders.
6. Change the Vehicle number for the third order to 897. Notice how the price changes.
7. Add a new order line with the current date for Vehicle number 1016. Fill a customer name and copy the formula from above to look up the price.

The screenshot shows an Excel spreadsheet with a table of vehicle orders and a price list. The VLOOKUP function is being used to find the price for a vehicle based on its ID. The formula bar shows the formula: `=VLOOKUP(B2,J2:P73,7,FALSE)`. The dialog box for the VLOOKUP function is open, showing the following arguments:

- Lookup_value: B2
- Table_array: \$J\$2:\$P\$73
- Col_index_num: 7
- Range_lookup: FALSE

The formula result is 11866. The Price List table is as follows:

ID #	YEAR	MAKE	TYPE	ODOMETER	DEPARTMENT ASSIGNED	PRICE
87	2002	Ford	Sedan	37780	Maintenance	20888
195	2004	Ford	Truck	19870	Security	18682
503	2003	Chevrolet	Sedan	8900	Maintenance	20904
678	1995	Ford	Pickup	73419	Corporate	11866
		Dodge	Van	43907	Maintenance	15844
		Ford	Van	24575	Corporate	19846
		Chevrolet	Van	16896	Corporate	20824
		Chevrolet	Pickup	37786	Corporate	13783
		Ford	Pickup	32765	Corporate	5000
		Chevrolet	Van	138456	Maintenance	11449
		Ford	Sedan	59378	Marketing	20315
		GMC	Van	42313	Corporate	12500
		Ford	Sedan	49973	Maintenance	15090
		Ford	Van	43678	Security	21580
		Chevrolet	Pickup	50580	Maintenance	14130
		Ford	Sedan	62743	Maintenance	22413
		Ford	Truck	12703	Corporate	22724
		Chevrolet	Sedan	53383	Maintenance	16539
		Ford	Pickup	52728	Corporate	14757
		Ford	Van	3500	Security	22438
		Ford	Van	93484	Marketing	12149