Excel & Business Math
Video/Class Project #39
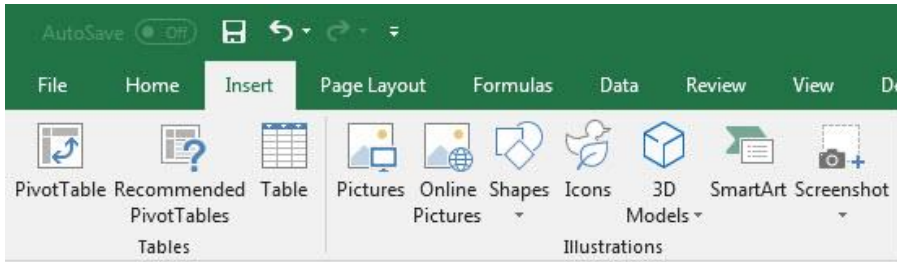## Create Invoices in Excel with Data Validation Drop-down, VLOOKUP & IF Functions

Topics

1) Format Invoice

1. Using the Formatting Tricks we learned earlier in the class, we formatted our Invoice, as seen here:

2) Insert Picture

1. Using the pictures button in the Illustrations group in the Interest Ribbon Tab, we inserted the Company Logo and a picture.

2. After we inserted the pictures, we resized and moved them into place on our Invoice, as seen here:

3) Calculate Wholesale Cost using a Single Trade Discount

1. As seen in the video on Trade Discounts, we created a formula for Wholesale Cost, as seen here:

Boomerangs Available	Wholesale Cost		List Price	Trade Discount %
Quad	=ROUND(F34*(1-G34),2)		$44.95	43.0%
Bellen	$13.72		$24.95	45.0%
Carlota	$10.58		$23.50	55.0%
Carlota Doublers	$41.57		$79.95	48.0%
Majestic Beaut	$14.70		$31.95	54.0%
Sunshine 5 Ply	$8.00		$19.99	60.0%
Sunshine 10 Ply	$11.50		$23.00	50.0%
Sunset	$11.75		$23.50	50.0%
Sunbell	$14.55		$26.95	46.0%
Flattop	$18.26		$30.95	41.0%
Bellen Dancer	$14.08		$29.95	53.0%
Bellen Wind Dancer	$15.16		$32.25	53.0%
GelFast	$14.10		$23.50	40.0%
Phenolic Sunshine	$24.42		$55.50	56.0%
Icarus MTA	$22.92		$43.25	47.0%

4) Data Validation - List to insert Drop-down list of Products

In order to allow the user of the Invoice to select a product name from a in-cell drop-down list, we can use the Data Validation, List feature in Excel.

1. Click the Data Validation button in the Data Ribbon tab in the Data Tools group, as seen here:
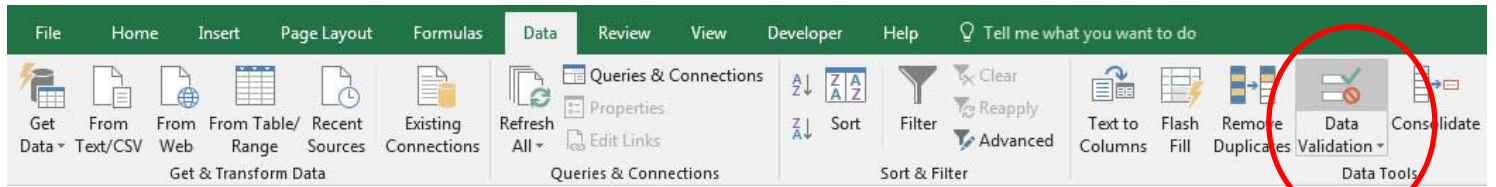
2. After clicking the Data Validation button, the Data Validation dialog box appears.
3. In the Allow Textbox, select "List"
4. Click in the Source textbox, and then using your Mouse select the range A34:A48.
5. Then Click OK.

1) Click the Data Validation button in the Data Ribbon tab in the Data Tools group.

2) After clicking the Data Validation button, the Data Validation dialog box appears.

3) In the Allow Textbox, select "List"

4) Click in the Source textbox, and then using your Mouse select the range A34:A48

5) Click OK.

5) Exact Match VLOOKUP to get price. IF and ISBLANK to turn formula off when no product entered.

1. We use VLOOKUP to do an Exact Match Lookup in order to get the price for each product, as seen below.
2. We use IF and ISTEXT to run the formula only when a product name is entered into the invoice, as seen below.

	A	B	C	D	E
12					11) CELL, SE
13	Item Purchased	Quantity	Price Each	Line Item total	
14	Quad		24	=IF(ISTEXT(A14),VLOOKUP(A14,$A$34:$B$48,2,FALSE),"")	
15	Bellen	12	$13.72	$164.64	
16	Sunshine 10 Ply	48	$11.50	$552.00	
17	Sunset	10	$11.75	$117.50	
18	Carlota	25	$10.58	$264.50	
19					
20					
21					
22					
23			Subtotal	$1,713.52	
24	Shipping Terms	FOB Shipping	Shipping	$25.00	
25	Terms	2/10, Net 45	Invoice Total	$1,738.52	
26					
27		Thank you for your business!			
28					
29					
30					
31					
32					
33	Boomerangs Available	Wholesale Cost			List Price
34	Quad	$25.62			
35	Bellen	$13.72			
36	Carlota	$10.58			
37	Carlota Doublers	$41.57			
38	Majestic Beaut	$14.70			
39	Sunshine 5 Ply	$8.00			
40	Sunshine 10 Ply	$11.50			
41	Sunset	$11.75			
42	Sunbell	$14.55			
43	Flattop	$18.26			
44	Bellen Dancer	$14.08			
45	Bellen Wind Dancer	$15.16			
46	GelFast	$14.10			
47	Phenolic Sunshine	$24.42			
48	Icarus MTA	$22.92			

6) IF & ISNUMBER for Line Item Total

In order to multiply the price and quantity only when a product is entered into the invoice, we use the IF and ISNUMBER Functions, as seen here:

	A	B	C	D	E
1		**Invoice**			
2		Gel Boomerangs			
3		1200 14th Ave S.			
4		Seattle WA, 98108			
5		800-FUN-BOOM			
6		GelBoomerangs@gmail			
7					
8	Sell To:		Invoice #	1255	
9	Kite Flight		Date	11/11/2011	
10	1414 43rd Ave.				
11	Watermore, KY 40025				
12					
13	Item Purchased	Quantity	Price Each	Line Item total	
14	Quad	24	$25.62	=IF(ISNUMBER(C14),C14*B14,"")	
15	Bellen	12	$13.72	$164.64	
16	Sunshine 10 Ply	48	$11.50	$552.00	
17	Sunset	10	$11.75	$117.50	
18	Carlota	25	$10.58	$264.50	
19					
20					
21					
22					
23			Subtotal	$1,713.52	
24	Shipping Terms	FOB Shipping	Shipping	$25.00	
25	Terms	2/10, Net 45	Invoice Total	$1,738.52	
26					
27		Thank you for your business!			
28					

7) SUM Function and other formulas for totals

We use the SUM Function for both our Subtotal and Invoice Total calculations. Picture not show here.

8) Page Setup

As we learned about earlier in this class, Page Setup in necessary to print just the Invoice and not the other elements of the spreadsheet. Here is a picture of the finished Page Setup from our Video Example:

Invoice

Gel Boomerangs
1200 14th Ave S.
Seattle WA, 98108
800-FUN-BOOM
GelBoomerangs@gmail

Sell To:		Invoice #	1255
Kite Flight		Date	11/11/2011
1414 43rd Ave.			
Watermore, KY 40025			

Item Purchased	Quantity	Price Each	Line Item Total
Quad	24	$25.62	$614.88
Bellen	12	$13.72	$164.64
Sunshine 10 Ply	48	$11.50	$552.00
Sunset	10	$11.75	$117.50
Carlota	25	$10.58	$264.50
		Subtotal	$1,713.52
Shipping Terms	FOB Shipping	Shipping	$25.00
Terms	2/10, Net 45	Invoice Total	$1,738.52

Thank you for your business!

Complete Invoice (1255an)

9) Copy a Sheet using Mouse & Ctrl Key

Note about copying Worksheets: If you have a number in parentheses and you copy a sheet, the number will increment by 0ne (as seen in video).

To copy a worksheet, you can use your Mouse and Ctrl Key.

Steps to copy Worksheet with Mouse and Ctrl Key:

1. Left Click the Worksheet with your Mouse and pull mouse up.
2. Then hold the Ctrl Key until you see the Plus Symbol on top of the sheet icon by your Mouse Icon.
3. Then let go of Mouse Key Click before letting go of the Ctrl Key.
4. The whole time the Downward-Pointing Black Arrow will indicate where the sheet will be dropped.

Downward-Pointing Black Arrow will indicate where the sheet will be dropped

Hold the Ctrl Key until you see the Plus Symbol on top of the sheet icon by your Mouse Icon

10) CELL, SEARCH, REPLACE and LEFT Functions to get Invoice Number

This is not required for this class.

But, this formula trick will allow us to get the Invoice Number from the Worksheet Tab name.

Here is the solution as seen in the video:

	J	K	L	M	N
12	File Name:	E:\00VideoClassStorage\135NoTextBook\Content\06BuyingSelling\StartFiles\[ExcelBusinessMathVideo39Invoices.xlsx]Complete Invoice (1255an)		=CELL("filename",A1)	
13	SEARCH	129		=SEARCH("(",K12)	
14	REPLACE	1255an)		=REPLACE(K12,1,K13,"")	
15	LEFT	1255		=LEFT(K14,4)	
16	Sheet Name:	1255		=K15+0	

Here is a description of each Function:

1. CELL
   - The CELL function returns information about the formatting, location, or contents of a cell, and can return the full file path name.
2. SEARCH
   - The SEARCH function returns the position of a specified character or sub-string within a supplied text string.
3. REPLACE
   - The REPLACE function replaces part of a text string, based on the number of characters you specify, with a different text string.
4. LEFT
   - The LEFT function returns a specified number of characters in a text string from the left.
5. Math Operator on a Text Number
   - Any math operation performed on a Number Stored as Text will convert the Text Number to an Actual Number.