

Lesson13-Filtering Data

Introduction

A	Α	В	
1	Equipn	nent Log — I	Ragnar Te
2	ID# ▼	Type 🚜	Equipme
3	1011	Laptop	10" Saris
4	1012	Laptop	10" Saris
5	1021	Laptop	15" EDI S
6	1022	Laptop	15" EDI S
7	1023	Laptop	15" EDI S
8	1025	Laptop	15" EDI S
9	1031	Laptop	17" Saris

Filters can be used to narrow down the data in your worksheet and hide parts of it from view. While it may sound a little like grouping, filtering is different in the way that it allows you to qualify and display only the data that interests you. For example, you could filter a list of survey participants to view only those who are between the ages of 25-34. You could also filter an inventory of paint colors to view anything that contains the word "blue," such as "bluebell" or "robin's egg blue."

In this lesson, you will learn how to **filter** the data in your worksheet to display only the information you need.

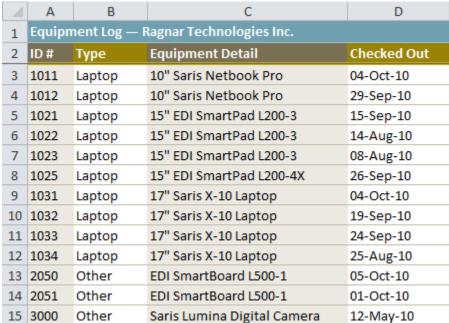
Filters can be applied in many different ways to improve the performance of your worksheet. You can filter text, dates, and numbers. You can even use more than one filter to further narrow down your results.

To Filter Data:

In this example, we will filter the contents of an equipment log at a technology company. We will display only the laptops and projectors that are available for check-out.



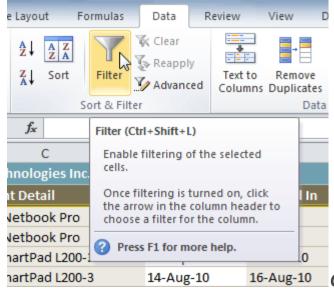
 Begin with a worksheet that identifies each column using a header row.



Worksheet with

header row

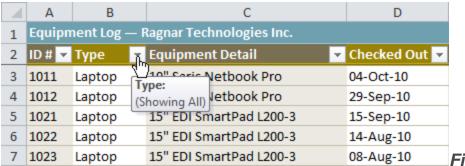
- 2. Select the **Data** tab, and locate the **Sort & Filter** group.
- Click the Filter command.



Clicking the filter command

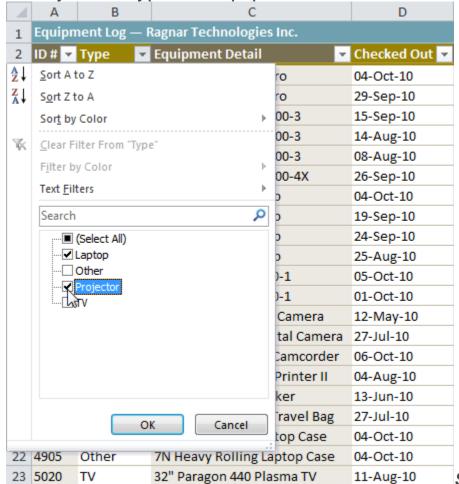
- 4. Drop-down arrows will appear in the header of each column.
- 5. Click the **drop-down arrow** for the column you would like to filter. In this example, we will filter the Type column to view only certain types equipment.





Filtering a column

- 6. The **Filter** menu appears.
- 7. **Uncheck** the boxes next to the data you don't want to view. (You can uncheck the box next to **Select All** to quickly uncheck all.)
- 8. **Check** the boxes next to the data you do want to view. In this example, we will check Laptop and Projector to view only those types of equipment.



Selecting filter

data



9. Click **OK**. All other data will be filtered, or temporarily hidden. Only laptops and projectors will be visible.

A	Α	В	С	D
1	Equipn	nent Log — F	Ragnar Technologies Inc.	
2	ID# ▼	Type 🚜	Equipment Detail	Checked Out 🔻
3	1011	Laptop	10" Saris Netbook Pro	04-Oct-10
4	1012	Laptop	10" Saris Netbook Pro	29-Sep-10
5	1021	Laptop	15" EDI SmartPad L200-3	15-Sep-10
6	1022	Laptop	15" EDI SmartPad L200-3	14-Aug-10
7	1023	Laptop	15" EDI SmartPad L200-3	08-Aug-10
8	1025	Laptop	15" EDI SmartPad L200-4X	26-Sep-10
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-10
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-10
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-10
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-10
26	6100	Projector	Omega VisX 1.0	28-Sep-10
27	6101	Projector	Omega VisX 1.0	26-Sep-10
28	6102	Projector	Omega VisX 1.0	22-Aug-10

worksheet

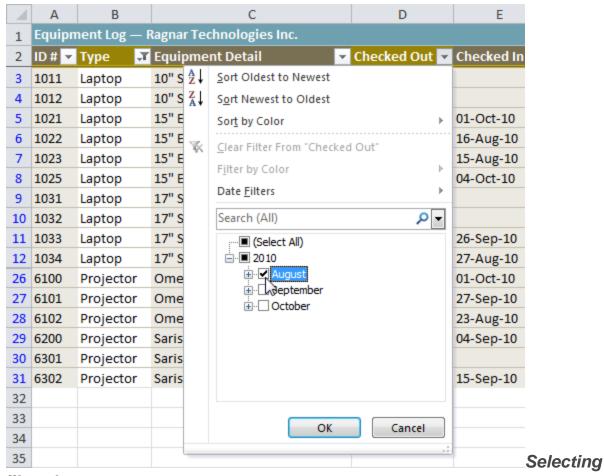
Filtering options can also be found on the Home tab, condensed into the **Sort & Filter** command.

To Add Another Filter:

Filters are additive, meaning you can use as many as you need to narrow down your results. In this example, we will work with a spreadsheet that has already been filtered to display only laptops and projectors. Now we will display only laptops and projectors that were checked out during the month of August.

- 1. Click the **drop-down arrow** where you would like to add a filter. In this example, we will add a filter to the Checked Out column to view information by date.
- 2. **Uncheck** the boxes next to the data you don't want to view. **Check** the boxes next to the data you do want to view. In this example, we will check the box next to August.





filter data

3. Click **OK**. In addition to the original filter, the new filter will be applied. The worksheet will be narrowed down even further.

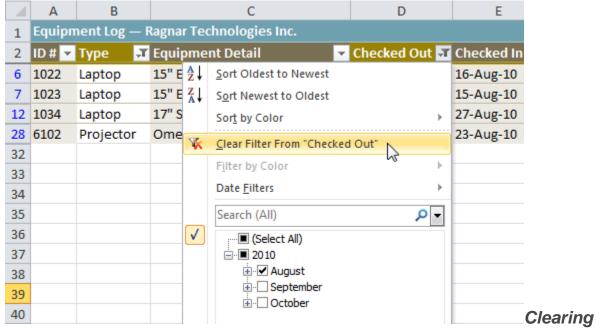


Worksheet with two filters

To Clear a Filter:

- 1. Click the **drop-down arrow** in the column from which you want to clear the filter.
- 2. Choose Clear Filter From...





a filter

3. The filter will be cleared from the column. The data that was previously hidden will be on display once again.

To instantly clear all filters from your worksheet, click the **Filter** command on the Data tab.

Advanced Filtering

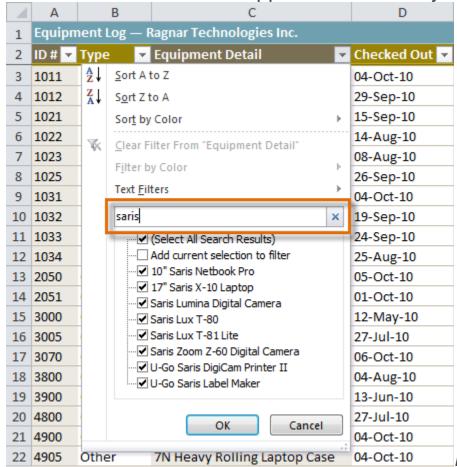
To Filter Using Search:

Searching for data is a convenient alternative to checking or unchecking data from the list. You can search for data that contains an exact phrase, number, or date, or a simple fragment. For example, searching for the exact phrase "Saris X-10 Laptop" will display only Saris X-10 Laptops. Searching for the word "Saris," however, will display Saris X-10 Laptops, and any other Saris equipment, including projectors, digital cameras, and more.

1. From the **Data** tab, click the **Filter** command.



- 2. Click the **drop-down arrow** in the column you would like to filter. In this example, we will filter the Equipment Detail column to view only a specific brand.
- 3. Enter the data you would like to view in the **Search** box. We will enter the word "Saris" to find all Saris brand equipment. The search results will appear automatically.



Entering a search

- 4. **Check** the boxes next to the data you want to display. We will display all the data that includes the brand name Saris.
- 5. Click **OK**. The worksheet will be filtered according to your search term.



	Α	В	С	D
1	Equipn	nent Log — I	Ragnar Technologies Inc.	
2	ID# ▼	Type ▼	Equipment Detail	Checked Out
3	1011	Laptop	10" Saris Netbook Pro	04-Oct-10
4	1012	Laptop	10" Saris Netbook Pro	29-Sep-10
9	1031	Laptop	17" Saris X-10 Laptop	04-Oct-10
10	1032	Laptop	17" Saris X-10 Laptop	19-Sep-10
11	1033	Laptop	17" Saris X-10 Laptop	24-Sep-10
12	1034	Laptop	17" Saris X-10 Laptop	25-Aug-10
15	3000	Other	Saris Lumina Digital Camera	12-May-10
16	3005	Other	Saris Zoom Z-60 Digital Camera	27-Jul-10
18	3800	Other	U-Go Saris DigiCam Printer II	04-Aug-10
19	3900	Other	U-Go Saris Label Maker	13-Jun-10
29	6200	Projector	Saris Lux T-80	01-Sep-10
30	6301	Projector	Saris Lux T-81 Lite	10-Sep-10
31	6302	Projector	Saris Lux T-81 Lite	08-Sep-10
32				

Worksheet

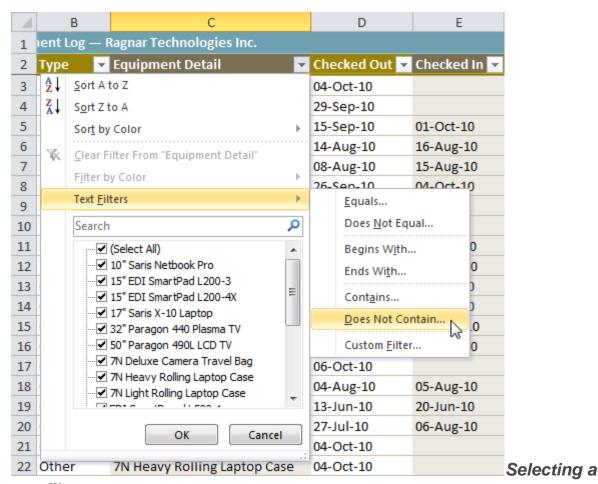
filtered using Search

To Use Advanced Text Filters:

Advanced text filters can be used to display more specific information, such as cells that contain a certain number of characters, or data that does not contain a word you specify. In this example, we will use advanced text filters to hide any equipment that is related to cameras, including digital cameras, camcorders, and more.

- 1. From the **Data** tab, click the **Filter** command.
- 2. Click the **drop-down arrow** in the column of **text** that you would like to filter. In this example, we will filter the Equipment Detail column to view only certain kinds of equipment.
- 3. Choose **Text Filters** to open the advanced filtering menu.
- Choose a filter. In this example, we will choose Does Not Contain to view data that does not contain the text we specify.

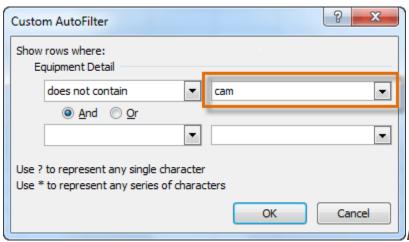




text filter

- 5. The **Custom AutoFilter** dialog appears.
- 6. Enter your text to the right of your filter. In this example, we will enter "cam" to view data that does not contain those letters. That will exclude any equipment related to cameras, such as digital cameras, camcorders, camera bags, and the digicam printer.





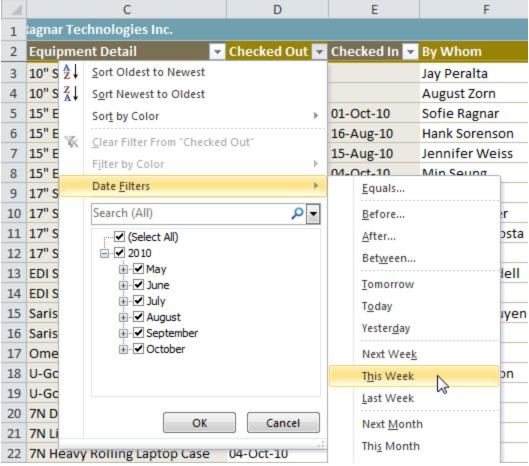
Entering filter text

7. Click **OK**. The data will be filtered according to the filter you chose and the text you specified.

To Use Advanced Date Filters:

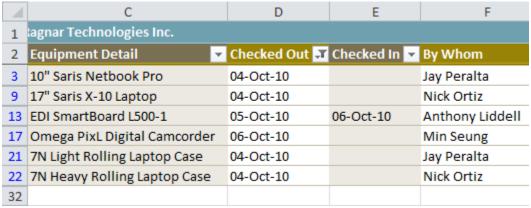
Advanced date filters can be used to view information from a certain time period, such as last year, next quarter, between two dates, and more. Excel automatically knows your current date and time, making this tool very easy to use. In this example, we will use advanced date filters to view only the equipment that has been checked out this week.

- 1. From the **Data** tab, click the **Filter** command.
- 2. Click the **drop-down arrow** in the column of **dates** that you would like to filter. In this example, we will filter the Checked Out column to view only a certain range of dates.
- 3. Choose **Date Filters** to open the advanced filtering menu.
- 4. Click a **filter**. We will choose This Week to view equipment that has been checked out this week.

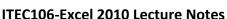


Selecting a date filter

5. The worksheet will be filtered according to the date filter you chose.



Worksheet filtered by date



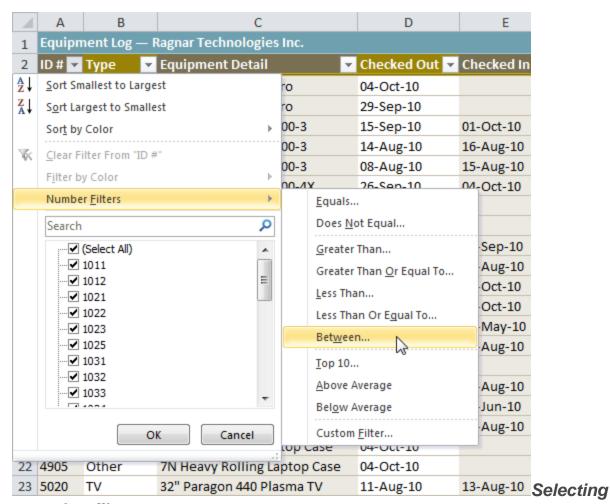


To Use Advanced Number Filters:

Advanced number filters allow you to manipulate numbered data in many different ways. For example, in a worksheet of exam grades, you could display the top and bottom numbers to view the highest and lowest scores. In this example, we will display only certain kinds of equipment based on the range of ID #s that have been assigned to them.

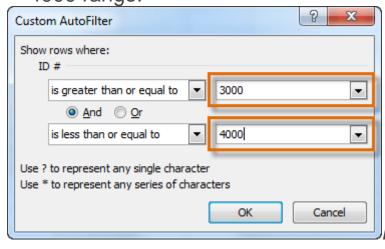
- 1. From the **Data** tab, click the **Filter** command.
- 2. Click the **drop-down arrow** in the column of **numbers** that you would like to filter. In this example, we will filter the ID # column to view only a certain range of ID #s.
- Choose Number Filters to open the advanced filtering menu.
- 4. Choose a **filter**. In this example, we will choose Between to view ID #s between the numbers we specify.





a number filter

5. Enter a **number** to the right of each filter. In this example, we will view ID #s greater than or equal to 3000, but less than or equal to 4000. That will display ID #s in the 3000-4000 range.



Entering filter numbers



6. Click **OK**. The data will be filtered according to the filter you chose and the numbers you specified.



filtered by number

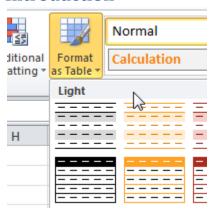
Challenge!

- 1. Open an existing Excel workbook. If you want, you can use lesson13 file.
- 2. Filter a column of data. If you are using the example, filter the Type column so it displays only laptops and "other" equipment.
- 3. Add another filter by searching for the data you want. If you are using the example, search for EDI brand equipment in the Item Description column.
- 4. Clear both filters.
- 5. Use an advanced text filter to view data that does not contain a certain word or phrase. If you are using the example, display data that does not contain the word "cam." (This should exclude any camera-related equipment, such as digitalcameras and the camcorder.)
- Use an advanced date filter to view data from a certain time period. If you are using the example, display only the equipment that was checked out last month.
- 7. Use an advanced number filter to view numbers less than a certain amount. If you are using the example, display all ID #s below 3000.



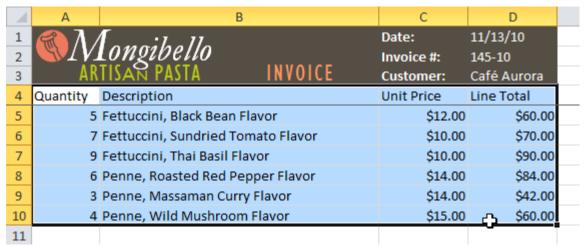
Lesson14-Formatting Tables

Introduction



To Format Information as a Table:

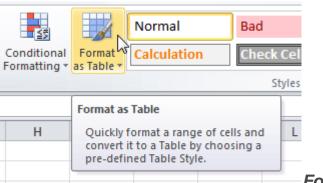
1. Select the cells you want to format as a table. In this example, an invoice, we will format the cells that contain the column headers and the order details.



Selecting cells to format as a table

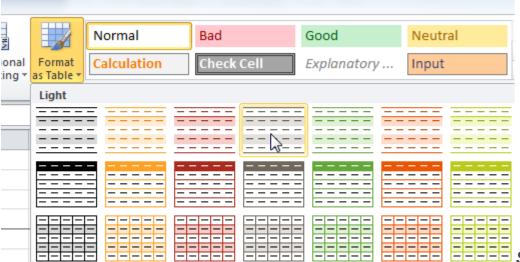
2. Click the **Format as Table** command in the **Styles** group on the Home tab.





Format as Table command

3. A list of predefined **table styles** will appear. Click a table style to select it.

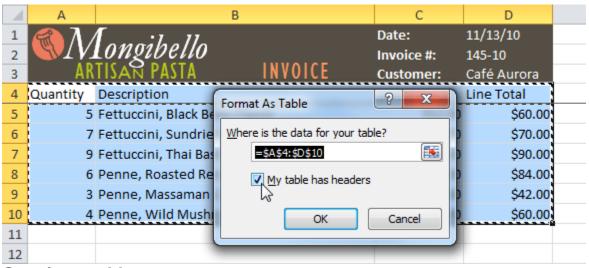


Selecting

a table style

- 4. A dialog box will appear, confirming the **range** of cells you have selected for your table. The cells will appear selected in the spreadsheet, and the range will appear in the dialog box.
- 5. If necessary, **change** the range by selecting a new range of cells directly on your spreadsheet.
- 6. If your table has headers, check the box next to **My table** has headers.





Creating a table

7. Click **OK**. The data will be formatted as a table in the style that you chose.



Data formatted as a table

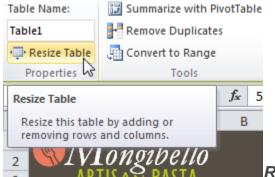
Tables include filtering by default. You can filter your data at any time using the drop-down arrows in the headerTo convert a table back into "normal" cells, click the Convert to Range command in the Tools group. The filters and the Design tab will then disappear, but the cells will retain their data and formatting.



Modifying Tables

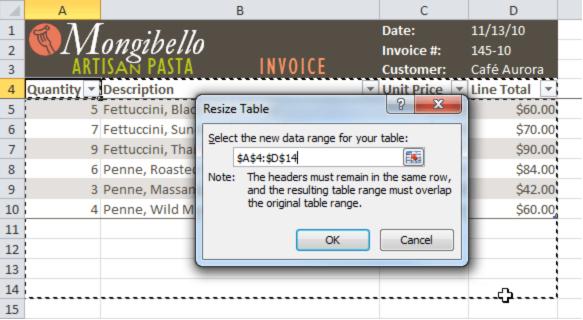
To Add Rows or Columns:

- 1. Select **any cell** in your table. The **Design** tab will appear on the Ribbon.
- 2. From the Design tab, click the Resize Table command.



Resize Table command

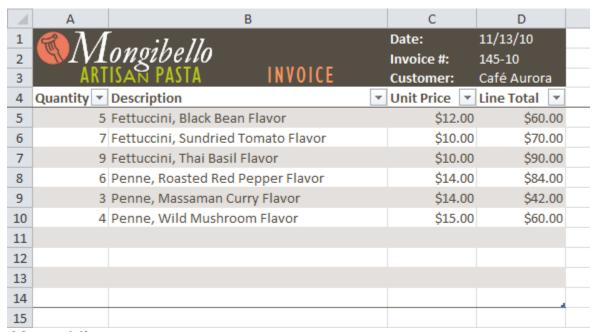
3. Directly on your spreadsheet, select the new **range** of cells that you want your table to cover. You must select your original table cells as well.



Selecting a new range of cells

 Click **OK**. The new rows and/or columns will be added to your table.

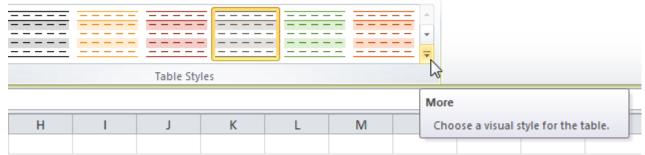




After adding new rows

To Change the Table Style:

- 1. Select any cell in your table. The Design tab will appear.
- 2. Locate the **Table Styles** group. Click the **More** drop-down arrow to see all of the table styles.



The More drop-down arrow

- 3. Hover the mouse over the various styles to see a live preview.
- 4. Select the desired style. The table style will appear in your worksheet.



A	Α		В		С		D	
1	₹ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Date	Date:		11/13/10	
2	WIVI VI	ongibello		Invo	ice #:	14	5-10	
3	ART	ISAN PASTA	INVOICE	Cust	omer:	Ca	ifé Aurora	a
4	Quantity 💌	Description		▼ Unit	Price	▼ Lir	ne Total	₩
5	5 Fettuccini, Black Bean Flavor				\$12.	00	\$60.	00
6	7 Fettuccini, Sundried Tomato Flavor				\$10.	00	\$70.	00
7	9 Fettuccini, Thai Basil Flavor				\$10.	00	\$90.	00
8	6 Penne, Roasted Red Pepper Flavor				\$14.00		\$84.	00
9	3 Penne, Massaman Curry Flavor				\$14.00			00
10	4 Penne, Wild Mushroom Flavor				\$15.00			00
11								

After changing the table style

To Change the Table Style Options:

When using an Excel table, you can turn various options on or off to change its appearance. There are six options:Header Row, Total Row, Banded Rows, First Column, Last Column, and Banded Columns.

- 1. Select any cell in your table. The Design tab will appear.
- 2. From the **Design** tab, **check** or **uncheck** the desired options in the **Table Style Options** group.



Table style options

Depending on the Table Style you're using, certain Table Style Options may have a different effect. You may need to experiment to get the exact look you want.

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ITEC106-Excel 2010 Lecture Notes

Challenge!

- 1. Open an existing Excel workbook. If you want, you can use lesson14 file.
- 2. Format a range of cells as a table. If you are using the example, format the column headers (Quantity, Description, etc.) and the order details.
- 3. Add a row or a column.
- 4. Change the table style options. If you are using the example, add a total row.
- 5. Change the table style several times. Take note of how the table options may appear different depending on the style you use.