

Spreadsheet Software

Terry Marris August 2009

7 Filters

We have seen how to sort data, and how to create line charts, bar charts and pie charts, how to create area charts, stacked bar charts and scatter charts. Now, we see how to filter data.

1. create the spreadsheet shown below:

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					

7.1 Filter by Text

We select all the holidays in Tenby.

Preparation

1. in cell A26 put the heading *Holidays in Tenby*
2. highlight the resorts including the heading

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					
26	Holidays in Tenby				
27					
28					
29					

3. on the Ribbon click the down arrow on Sort & Filter



- click Filter to toggle Filtering on



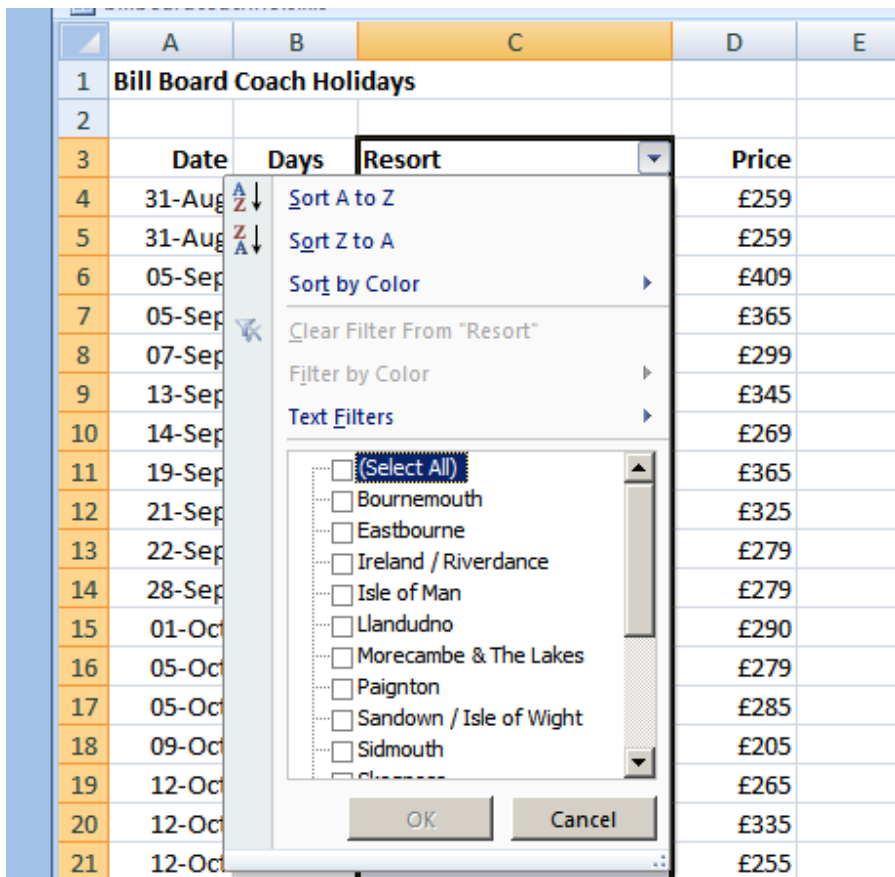
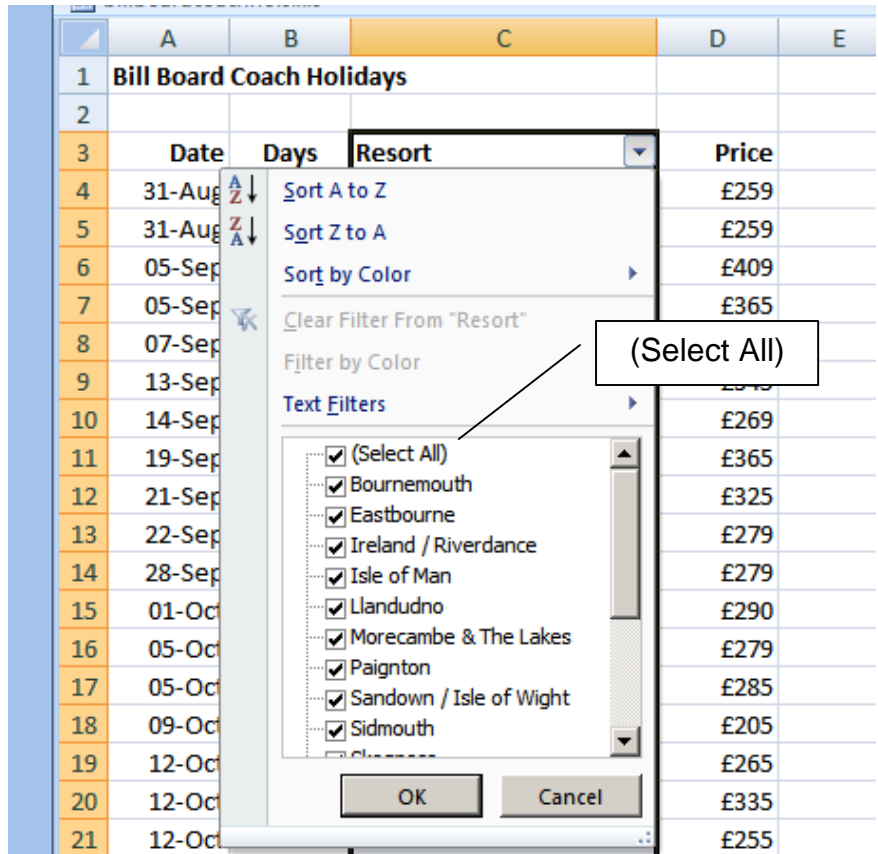
Select Filter Criteria

- click down arrow in the Resort heading

	A	B	C	D
1	Bill Board Coach Holidays			
2				
3	Date	Days	Resort	Price
4	31-Aug	5	Weston Super Mare	£259
5	31-Aug	5	Skegness	£259
6	05-Sep	8	Sandown / Isle of Wight	£409
7	05-Sep	5	Isle of Man	£365
8	07-Sep	5	Torquay	£299
9	13-Sep	6	Tenby	£345
10	14-Sep	5	Bournemouth	£269
11	19-Sep	8	Eastbourne	£365
12	21-Sep	5	Weymouth	£325
13	22-Sep	5	Llandudno	£279
14	28-Sep	5	Morecambe & The Lakes	£279
15	01-Oct	5	Sidmouth	£290
16	05-Oct	5	Worthing	£279
17	05-Oct	5	Southport & Liverpool	£285
18	09-Oct	4	Paignton	£205
19	12-Oct	5	Llandudno	£265
20	12-Oct	5	Ireland / Riverdance	£335
21	12-Oct	5	Eastbourne	£255
22	19-Oct	5	Tenby	£245
23	19-Oct	5	Sandown / Isle of Wight	£245
24				
25				
26	Holidays in Tenby			
27				

down arrow

2. click (Select All) to deselect everything




3. select Tenby

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort		Price
4	31-Aug		Sort A to Z		£259
5	31-Aug		Sort Z to A		£259
6	05-Sep		Sort by Color		£409
7	05-Sep		Clear Filter From "Resort"		£365
8	07-Sep		Filter by Color		£299
9	13-Sep		Text Filters		£345
10	14-Sep		<input type="checkbox"/> Isle of Man		£269
11	19-Sep		<input type="checkbox"/> Llandudno		£365
12	21-Sep		<input type="checkbox"/> Morecambe & The Lakes		£325
13	22-Sep		<input type="checkbox"/> Paignton		£279
14	28-Sep		<input type="checkbox"/> Sandown / Isle of Wight		£279
15	01-Oct		<input type="checkbox"/> Sidmouth		£290
16	05-Oct		<input type="checkbox"/> Skegness		£279
17	05-Oct		<input type="checkbox"/> Southport & Liverpool		£285
18	09-Oct		<input checked="" type="checkbox"/> Tenby		£205
19	12-Oct		<input type="checkbox"/> Torquay		£265
20	12-Oct		<input type="checkbox"/> Weston Super Mare		£335
21	12-Oct				£255


4. click OK. Notice the Filter icon.

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort		Price
9	13-Sep	6	Tenby		£345
22	19-Oct	5	Tenby		£245
24					

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort		Price
9	13-Sep	6	Tenby		£345
22	19-Oct	5	Tenby		£245
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort		Price
28	13-Sep	6	Tenby		£345
29	19-Oct	5	Tenby		£245
30					

Tidy Up

1. click on the Filter icon in the Resort heading
2. choose Clear Filter from Resort
3. OK

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort		Price
9	13-Sep				£345
22	19-Oct				£245
24					
25					
26	Holidays				
27	Date				Price
28	13-Sep				
29	19-Oct	<input checked="" type="checkbox"/>			
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					

Filter menu options:

- Sort A to Z
- Sort Z to A
- Sort by Color
- Clear Filter From "Resort"**
- Filter by Color
- Text Filters
 - (Select All)
 - Bournemouth
 - Eastbourne
 - Ireland / Riverdance
 - Isle of Man
 - Llandudno
 - Morecambe & The Lakes
 - Paignton
 - Sandown / Isle of Wight
 - Sidmouth

Buttons: OK, Cancel

- on the Ribbon click Sort & Filter



- choose Filter to toggle filter off

The Spreadsheet so far

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort	Price	
28	13-Sep	6	Tenby	£345	
29	19-Oct	5	Tenby	£245	
30					

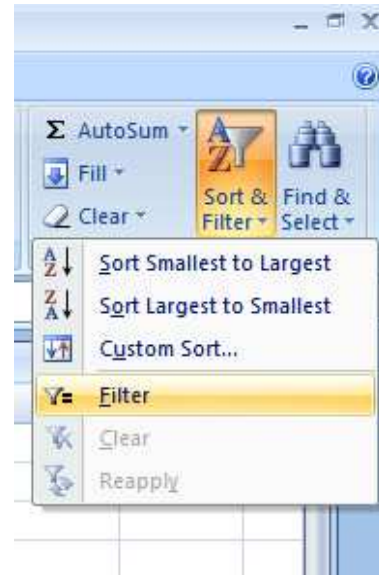
7.2 Filter by Number

We select all holidays longer than five days.

Preparation

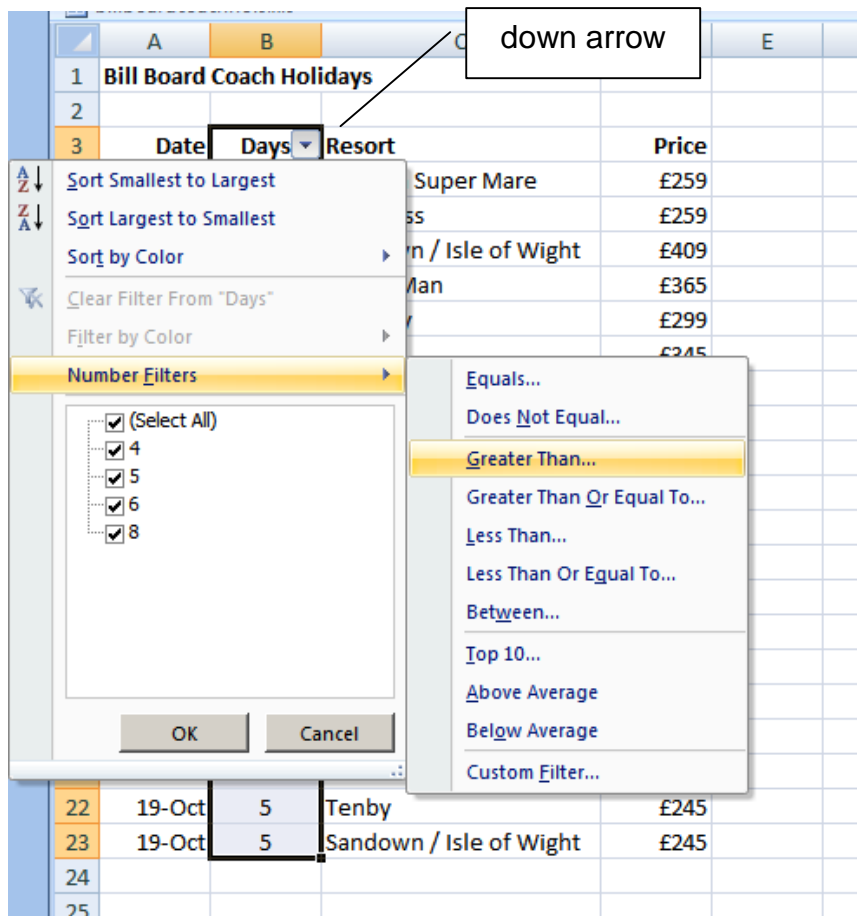
1. in A32 insert the heading *Holidays More Than Five Days*
2. highlight Days data column and toggle Filter on

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					

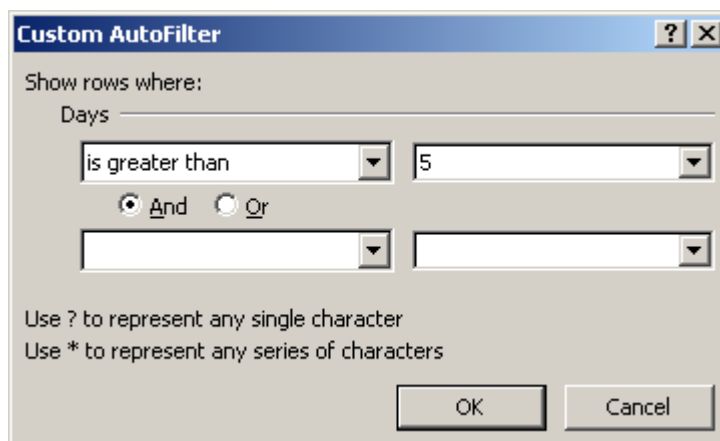


Selection

1. click on the Days Filter down arrow
2. choose Number Filters
3. choose Greater Than...



4. enter 5



5. OK

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
6	05-Sep	8	Sandown / Isle of Wight	£409	
9	13-Sep	6	Tenby	£345	
11	19-Sep	8	Eastbourne	£365	
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort	Price	
28	13-Sep	6	Tenby	£345	
29	19-Oct	5	Tenby	£245	
30					
31					
32	Holidays More Than 5 Days				

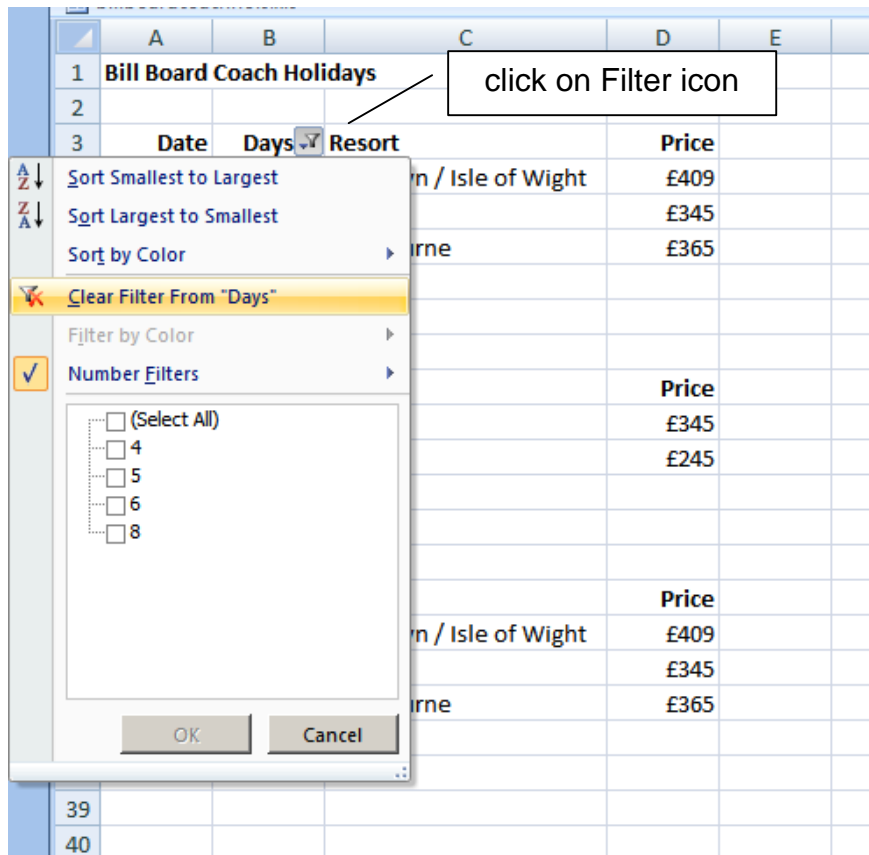
Copy

1. highlight the three holidays, along with their headings
2. right click
3. Copy
4. highlight A33
5. right click
6. Paste

	A	B	C	D
1	Bill Board Coach Holidays			
2				
3	Date	Days	Resort	Price
6	05-Sep	8	Sandown / Isle of Wight	£409
9	13-Sep	6	Tenby	£345
11	19-Sep	8	Eastbourne	£365
24				
25				
26	Holidays in Tenby			
27	Date	Days	Resort	Price
28	13-Sep	6	Tenby	£345
29	19-Oct	5	Tenby	£245
30				
31				
32	Holidays More Than 5 Days			
33	Date	Days	Resort	Price
34	05-Sep	8	Sandown / Isle of Wight	£409
35	13-Sep	6	Tenby	£345
36	19-Sep	8	Eastbourne	£365
37				
38				

Tidy Up

1. clear the filter from Days



2. switch off the Filter toggle



7.3 Filter by Price

We select all holidays costing less than £250.

Preparation

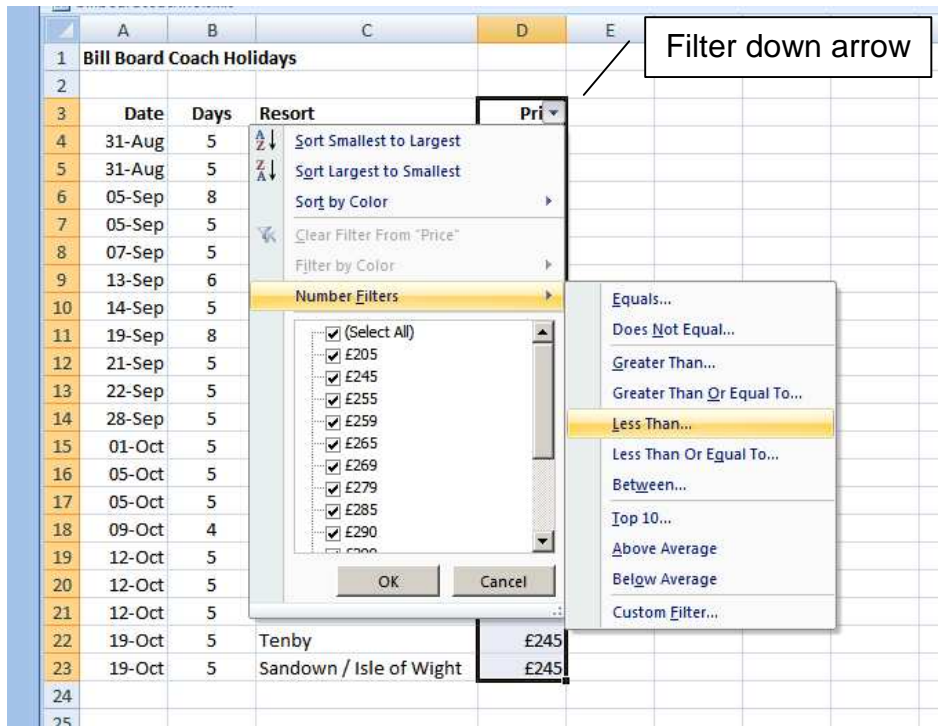
1. in A38 put the heading *Holidays Less Than £250*
2. highlight the Price data column
3. toggle Filter on

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					

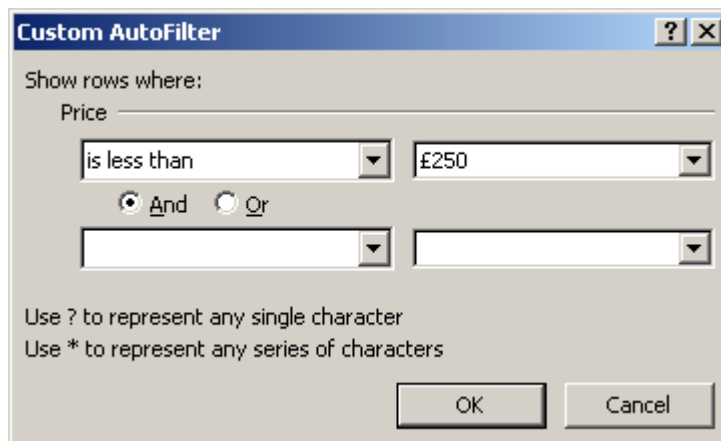


Selection

1. click on the filter down arrow in the Prices heading
2. choose Number Filters
3. choose Less Than...



4. insert £250



5. OK

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
18	09-Oct	4	Paignton	£205	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort	Price	
28	13-Sep	6	Tenby	£345	
29	19-Oct	5	Tenby	£245	
30					
31					
32	Holidays More Than 5 Days				
33	Date	Days	Resort	Price	
34	05-Sep	8	Sandown / Isle of Wight	£409	
35	13-Sep	6	Tenby	£345	
36	19-Sep	8	Eastbourne	£365	
37					
38					
39	Holidays Less Than £250				
40					

Copy

1. highlight the three holidays costing less than £250
2. right click
3. Copy
4. make cell A40 active
5. right click
6. Paste

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
18	09-Oct	4	Paignton	£205	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort	Price	
28	13-Sep	6	Tenby	£345	
29	19-Oct	5	Tenby	£245	
30					
31					
32	Holidays More Than 5 Days				
33	Date	Days	Resort	Price	
34	05-Sep	8	Sandown / Isle of Wight	£409	
35	13-Sep	6	Tenby	£345	
36	19-Sep	8	Eastbourne	£365	
37					
38					
39	Holidays Less Than £250				
40	Date	Days	Resort	Price	
41	09-Oct	4	Paignton	£205	
42	19-Oct	5	Tenby	£245	
43	19-Oct	5	Sandown / Isle of Wight	£245	
44					

Tidy Up

1. click on Price Filter icon
2. clear Filter from Price

Price Filter icon

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
18	09-Oct	4	Paignton	£205	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					
26	Holidays in Tenby				
27	Date	Days	Resort	Price	
28	13-Sep	6	Tenby	£345	
29	19-Oct	5	Tenby	£245	
30					
31					
32	Holidays More Than 5 Days				
33	Date	Days	Resort	Price	
34	05-Sep	8	Sandown / Isle of Wight	£409	
35	13-Sep	6	Tenby	£345	
36	19-Sep	8	Eastbourne	£365	
37					
38					
39	Holidays Less Than £250				
40	Date	Days	Resort	Price	
41	09-Oct	4	Paignton	£205	
42	19-Oct	5	Tenby	£245	
43	19-Oct	5	Sandown / Isle of Wight	£245	
44					

3. toggle Filter off



7.4 Filter by Date

We look for all the holidays in September.

Preparation

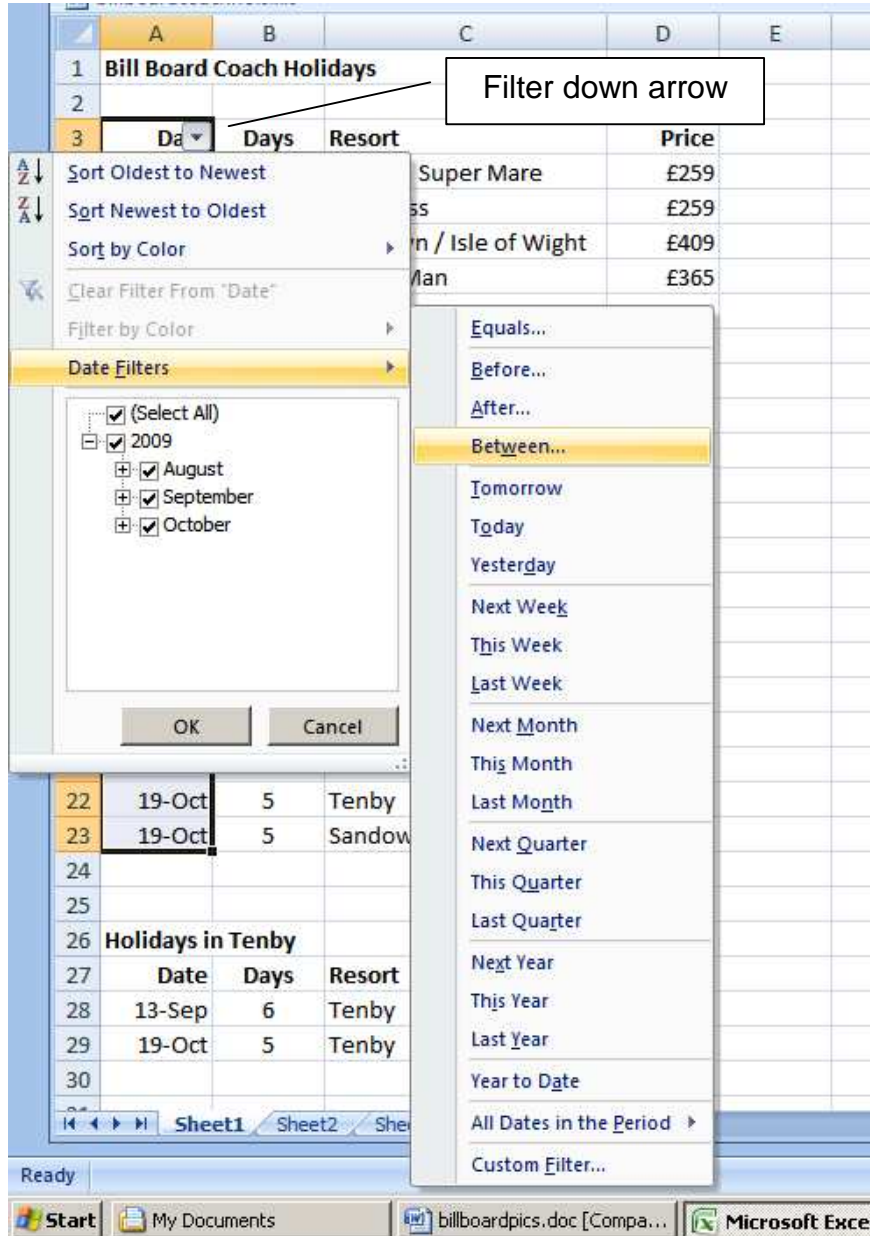
1. in cell A46 put the heading Holidays in September
2. highlight the Date data column
3. toggle Filter on

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
4	31-Aug	5	Weston Super Mare	£259	
5	31-Aug	5	Skegness	£259	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
15	01-Oct	5	Sidmouth	£290	
16	05-Oct	5	Worthing	£279	
17	05-Oct	5	Southport & Liverpool	£285	
18	09-Oct	4	Paignton	£205	
19	12-Oct	5	Llandudno	£265	
20	12-Oct	5	Ireland / Riverdance	£335	
21	12-Oct	5	Eastbourne	£255	
22	19-Oct	5	Tenby	£245	
23	19-Oct	5	Sandown / Isle of Wight	£245	
24					
25					



Filter

1. click on the Filter down arrow by the Date heading
2. choose Date Filters
3. choose Between...



4. insert 1 Sep and 30 Sep

Custom AutoFilter [?] [X]

Show rows where:

Date

is after or equal to 1 Sep [Calendar]

And Or

is before or equal to 30 Sep [Calendar]

Use ? to represent any single character
Use * to represent any series of characters

OK Cancel

5. OK

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort	Price	
6	05-Sep	8	Sandown / Isle of Wight	£409	
7	05-Sep	5	Isle of Man	£365	
8	07-Sep	5	Torquay	£299	
9	13-Sep	6	Tenby	£345	
10	14-Sep	5	Bournemouth	£269	
11	19-Sep	8	Eastbourne	£365	
12	21-Sep	5	Weymouth	£325	
13	22-Sep	5	Llandudno	£279	
14	28-Sep	5	Morecambe & The Lakes	£279	
24					
25					

Copy

1. highlight the September holidays
2. right click
3. Copy
4. make cell A47 active
5. right click
6. Paste

45				
46	Holidays in September			
47	Date	Days	Resort	Price
48	05-Sep	8	Sandown / Isle of Wight	£409
49	05-Sep	5	Isle of Man	£365
50	07-Sep	5	Torquay	£299
51	13-Sep	6	Tenby	£345
52	14-Sep	5	Bournemouth	£269
53	19-Sep	8	Eastbourne	£365
54	21-Sep	5	Weymouth	£325
55	22-Sep	5	Llandudno	£279
56	28-Sep	5	Morecambe & The Lakes	£279
57				

Tidy Up

1. clear Filter from Date

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E
1	Bill Board Coach Holidays				
2					
3	Date	Days	Resort		Price
			n / Isle of Wight		£409
			Man		£365
			y		£299
			mouth		£345
			mouth		£269
			rne		£365
			uth		£325
			no		£279
			mbe & The Lakes		£279
					Price
					£345
					£245

The 'Date' column is filtered to show only September 2009. The context menu is open, and the 'Clear Filter From "Date"' option is selected. A callout box points to the filter arrow in the 'Date' header with the text 'click Filter arrow'.

2. toggle Filter off



3. admire your completed spreadsheet
4. save and print

Note You can apply filtering to more than one column at a time if you want to.

7.5 Exercise

Try out the example spreadsheet shown above.

We have looked at filtering by text, by number, by price and by date.

Next we look at functions.

Bibliography

<http://office.microsoft.com/en-us/excel/HP10073941103.aspx> accessed August 2009