

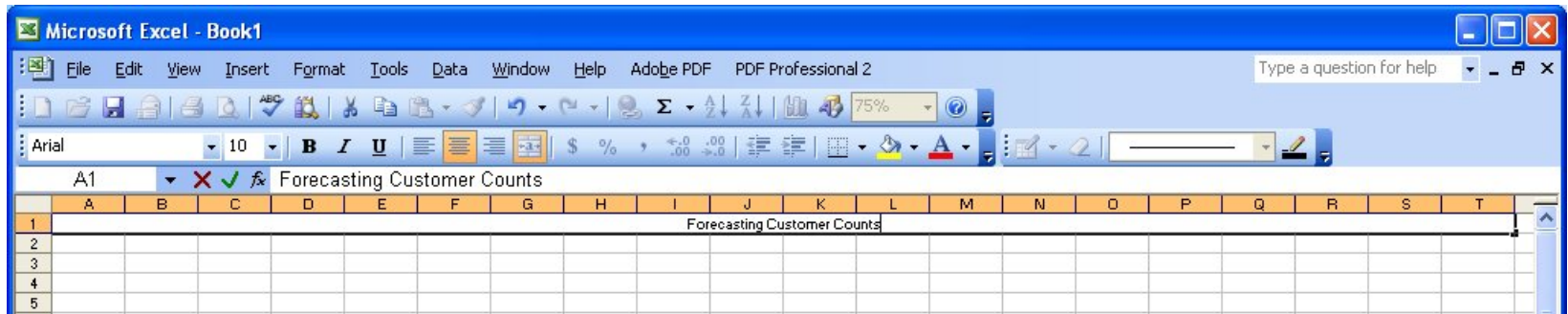
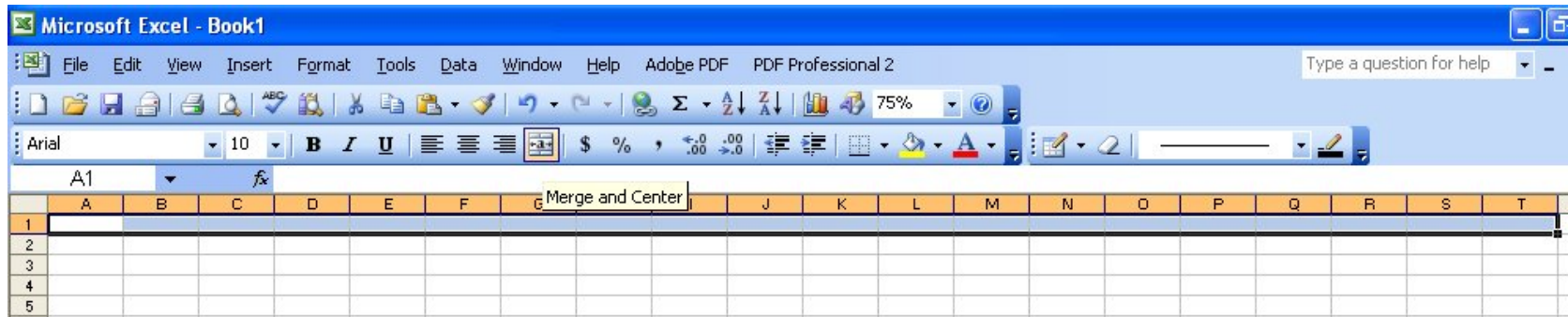
Customer Count Spreadsheet

May 13, 2009

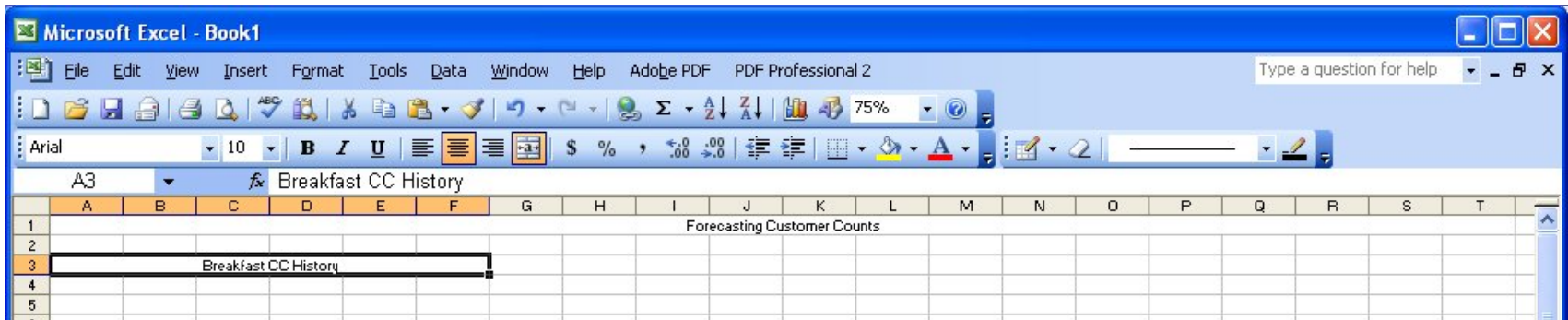
Why Do Customer Counts?

- Many forecasting spreadsheets require that we have the number of customers for breakfast, lunch, dinner or catering event.
- By using a spreadsheet, we can have the computer do the majority of the typing.
- We will use a Customer Count spreadsheet layout presented by Robert A. Ulm in chapter 5 of his textbook, *How Much to Buy*¹.

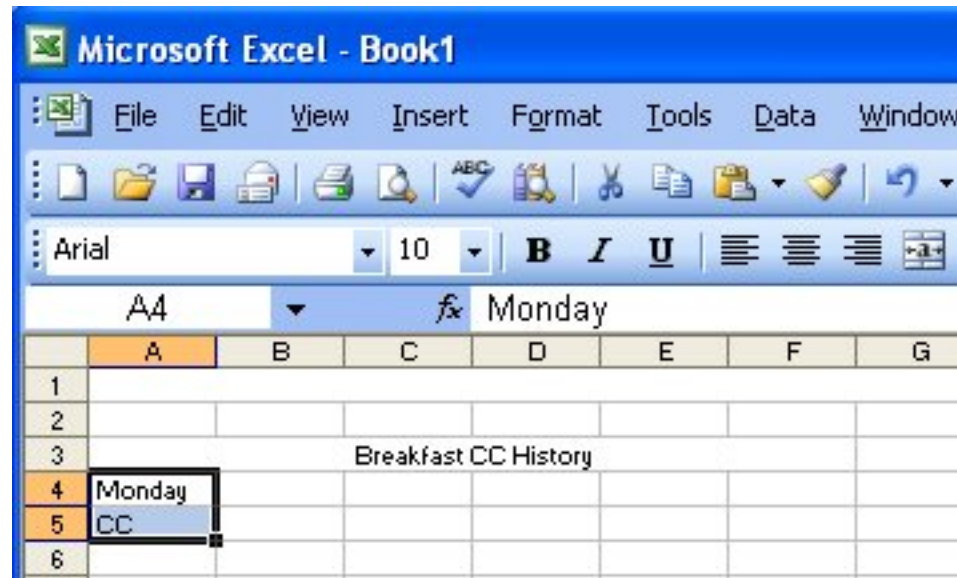
Merge and center A1 to T1, Type Forecasting Customer Counts



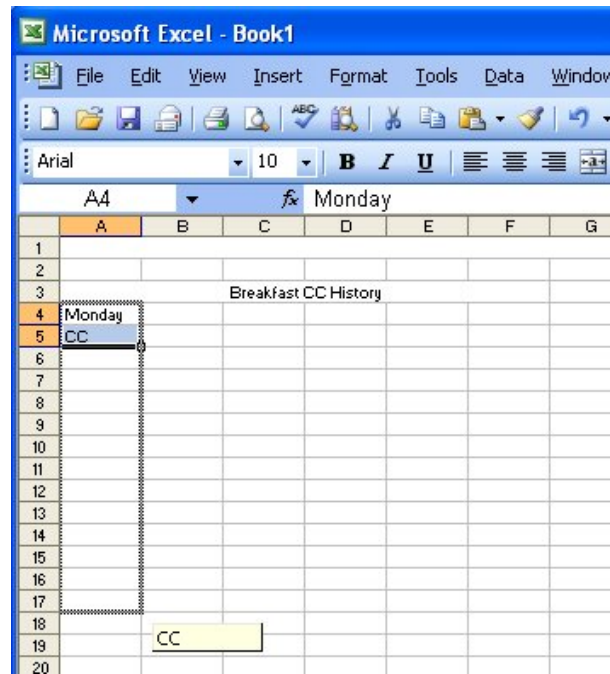
Merge and center A3 to F3, Type Breakfast CC History



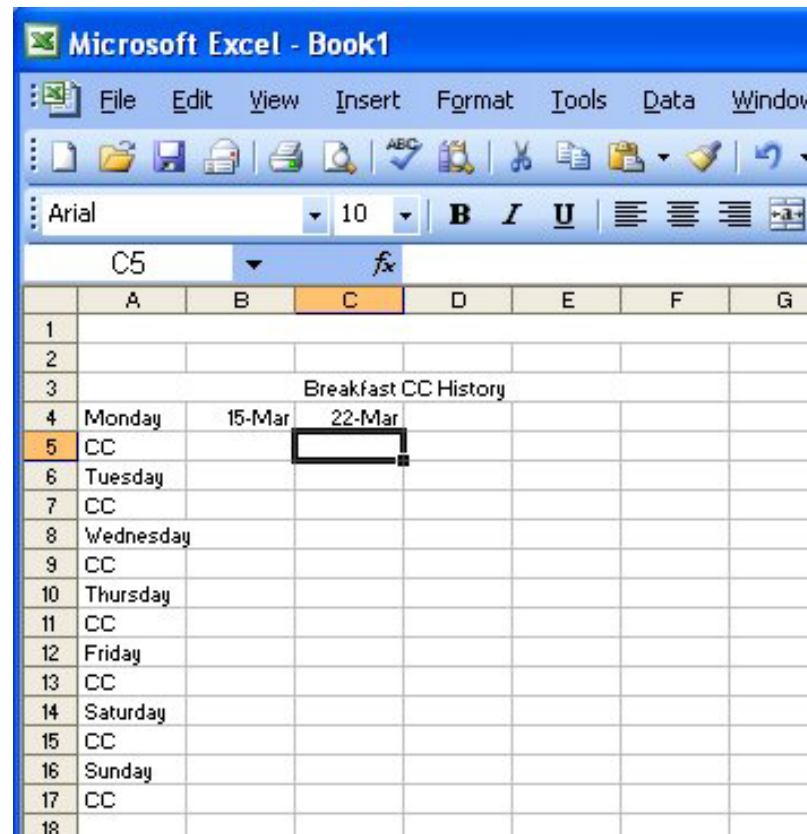
Type Monday in A4
Type CC in A5



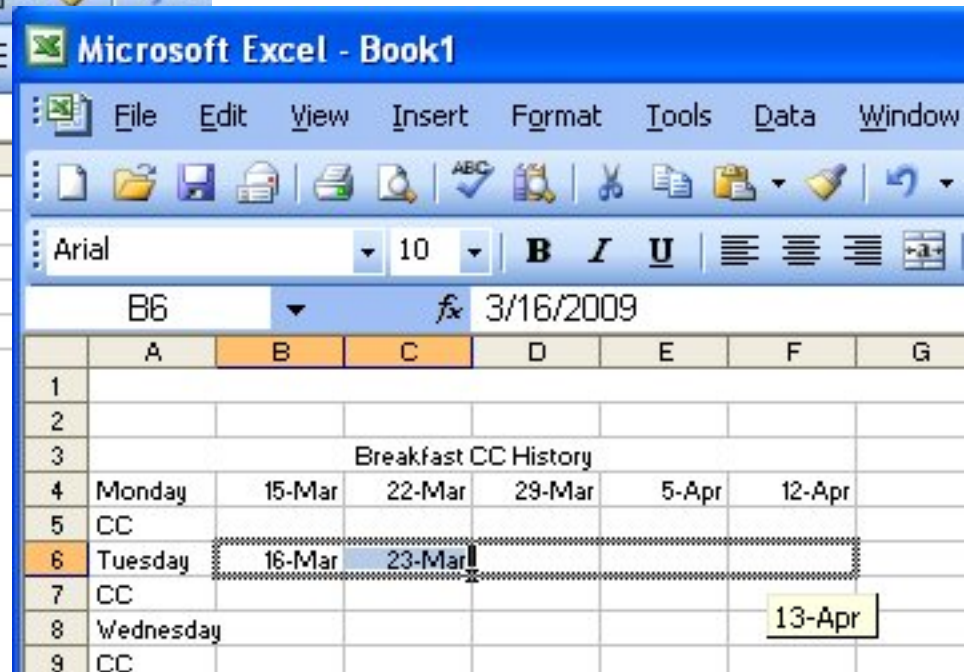
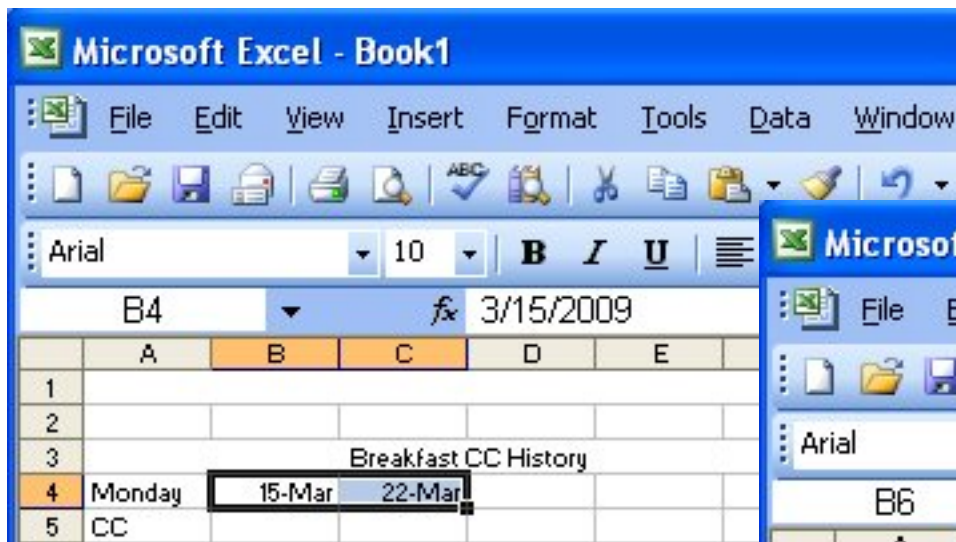
Highlight A4 and A5, Select the Fill Handle (black box) and pull down to row 17



Type 3/15 in cell B4
Type 3/22 in cell C4

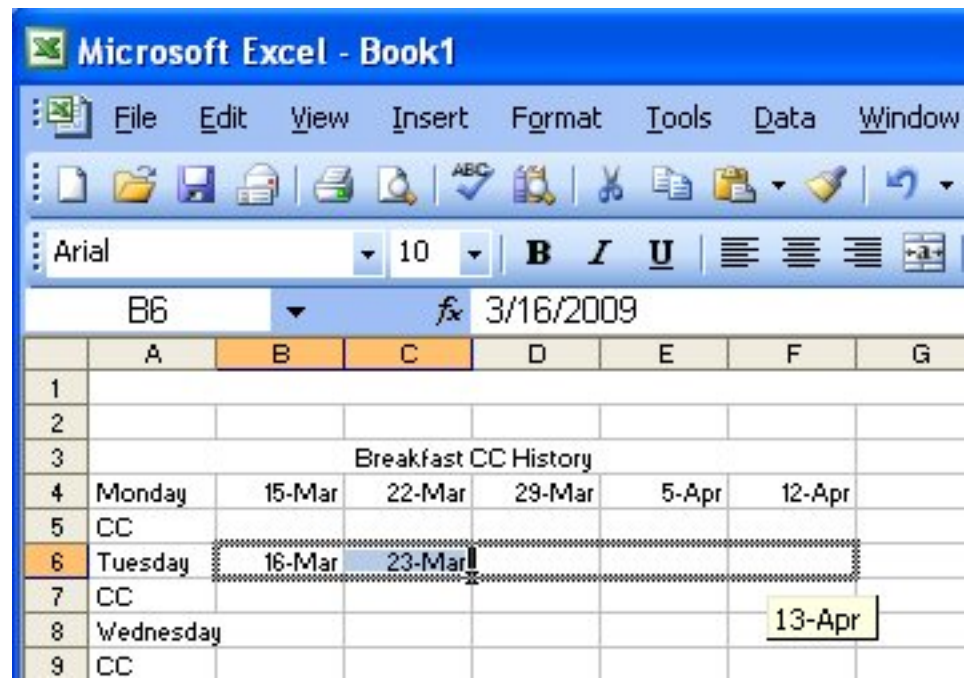


Highlight B4 and C4, Select the Fill Handle (black box) and pull across to column F



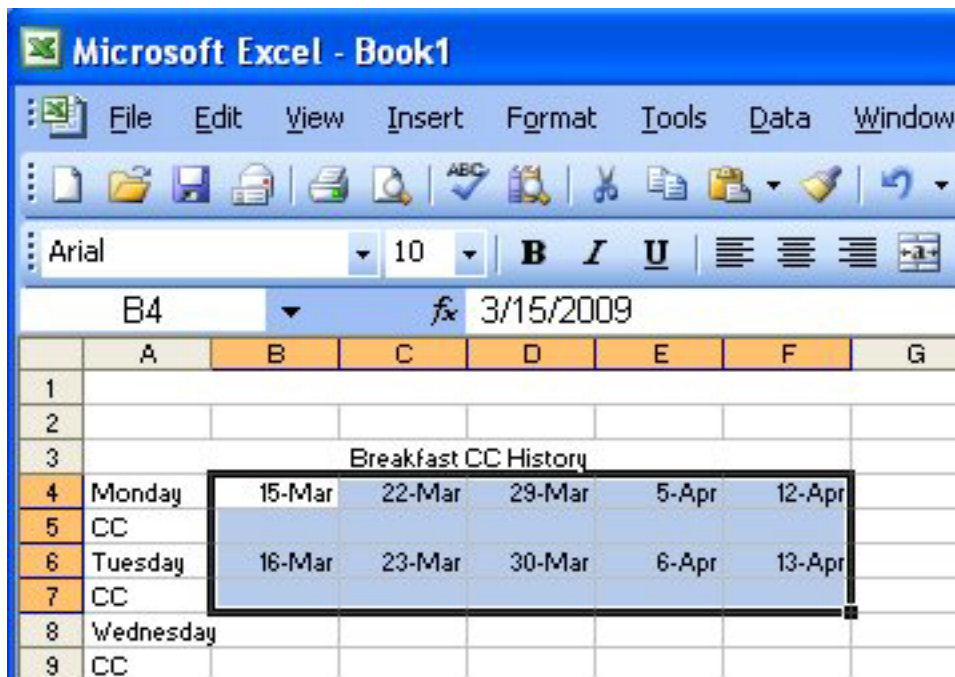
Type 3/16 in
cell B6

Type 3/23 in
cell C6

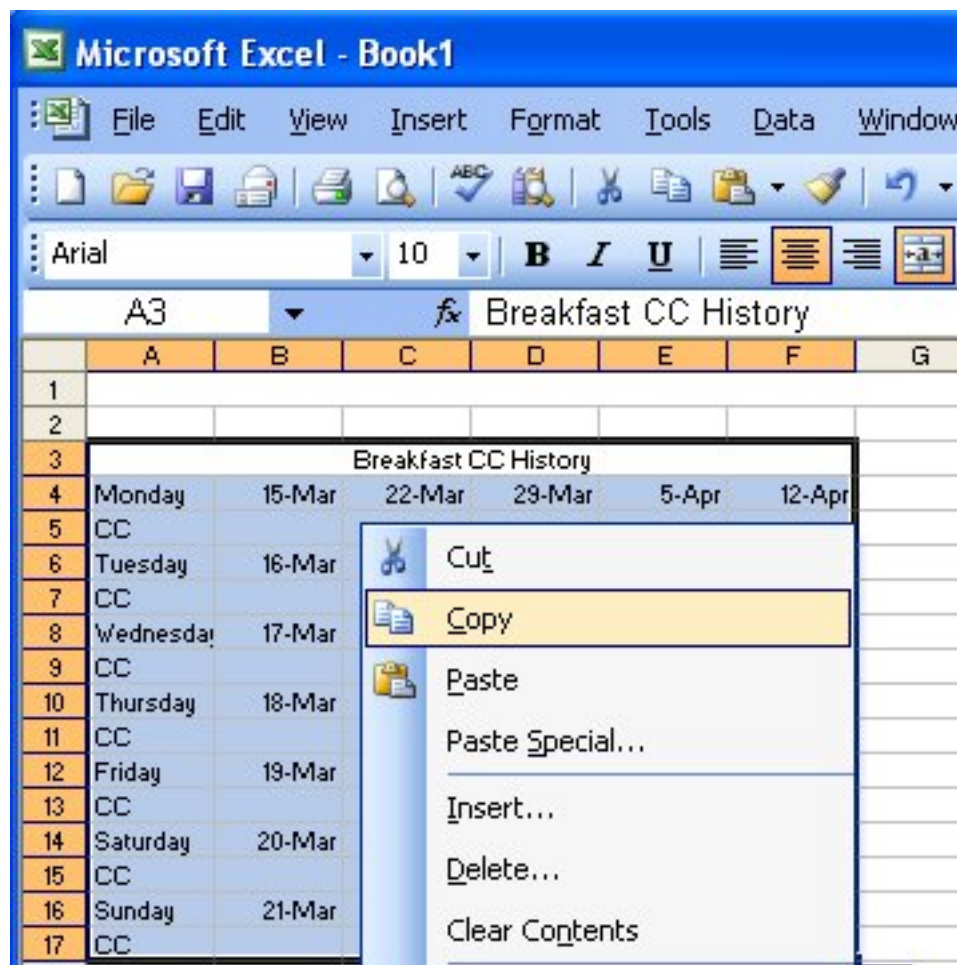


Highlight B6 and C6, Select the Fill
Handle (black box) and pull across
to column F

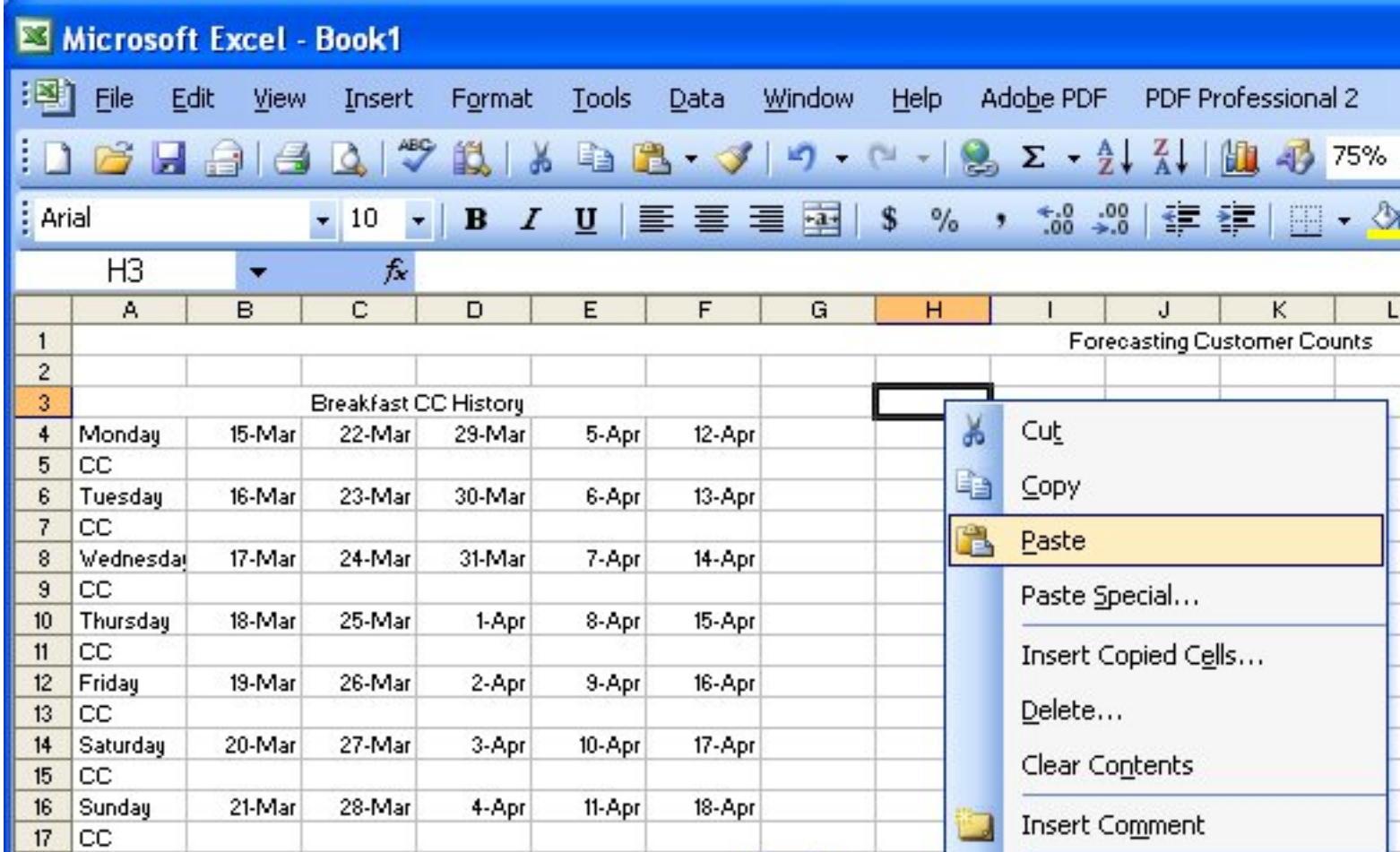
Highlight B4 to F7, Select the Fill Handle (black box) and pull down to row 17



Highlight A3 to F17, right click on the blue area and select copy



Select cell H3 and Paste



The screenshot shows the Microsoft Excel interface with the following data in the spreadsheet:

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3												
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr						
5	CC											
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr						
7	CC											
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr						
9	CC											
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr						
11	CC											
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr						
13	CC											
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr						
15	CC											
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr						
17	CC											

The context menu is open over cell H3, showing the following options:

- Cut
- Copy
- Paste (highlighted)
- Paste Special...
- Insert Copied Cells...
- Delete...
- Clear Contents
- Insert Comment

Select O3 and Paste

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help Adobe PDF PDF Professional 2

Type a question for help

Arial 10 B I U

O3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1																			
2																			
3																			
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr		Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr						
5	CC							CC											
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr		Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr						
7	CC							CC											
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr		Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr						
9	CC							CC											
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr		Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr						
11	CC							CC											
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr		Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr						
13	CC							CC											
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr						
15	CC							CC											
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr						
17	CC							CC											
18																			

Forecasting Customer Counts

Breakfast CC History

Breakfast CC History

Cut

Copy

Paste

Paste Special...

Insert...

Delete...

Clear Contents

Insert Comment

Change Breakfast to Lunch

Change Breakfast to Dinner

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help Adobe PDF PDF Professional 2

Type a question for help

Arial 10 B I U

M12 4/16/2009

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Forecasting Customer Counts																			
2																				
3	Breakfast CC History							Lunch CC History							Dinner CC History					
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr		Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr		Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr
5	CC							CC							CC					
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr		Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr		Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr
7	CC							CC							CC					
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr		Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr		Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr
9	CC							CC							CC					
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr		Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr		Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr
11	CC							CC							CC					
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr		Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr		Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr
13	CC							CC							CC					
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr
15	CC							CC							CC					
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr
17	CC							CC							CC					

Type in customer counts under

each date

Breakfast					
	Week 1	Week 2	Week 3	Week 4	Week 5
Monday	115	125	117	121	97
Tuesday	122	132	142	151	110
Wednesday	131	141	154	157	115
Thursday	160	154	178	140	120
Friday	180	214	174	135	141
Saturday	91	75	87	86	84
Sunday	191	201	208	197	204

Lunch					
	Week 1	Week 2	Week 3	Week 4	Week 5
Monday	135	142	157	168	178
Tuesday	142	154	126	137	145
Wednesday	173	201	204	208	215
Thursday	224	231	209	219	225
Friday	245	215	264	287	254
Saturday	195	187	156	181	201
Sunday	201	225	231	218	103

Dinner					
	Week 1	Week 2	Week 3	Week 4	Week 5
Monday	303	305	287	295	307
Tuesday	312	315	294	308	315
Wednesday	320	334	305	309	324
Thursday	331	345	329	301	319
Friday	350	361	305	375	354
Saturday	295	287	301	315	327
Sunday	200	215	199	204	209

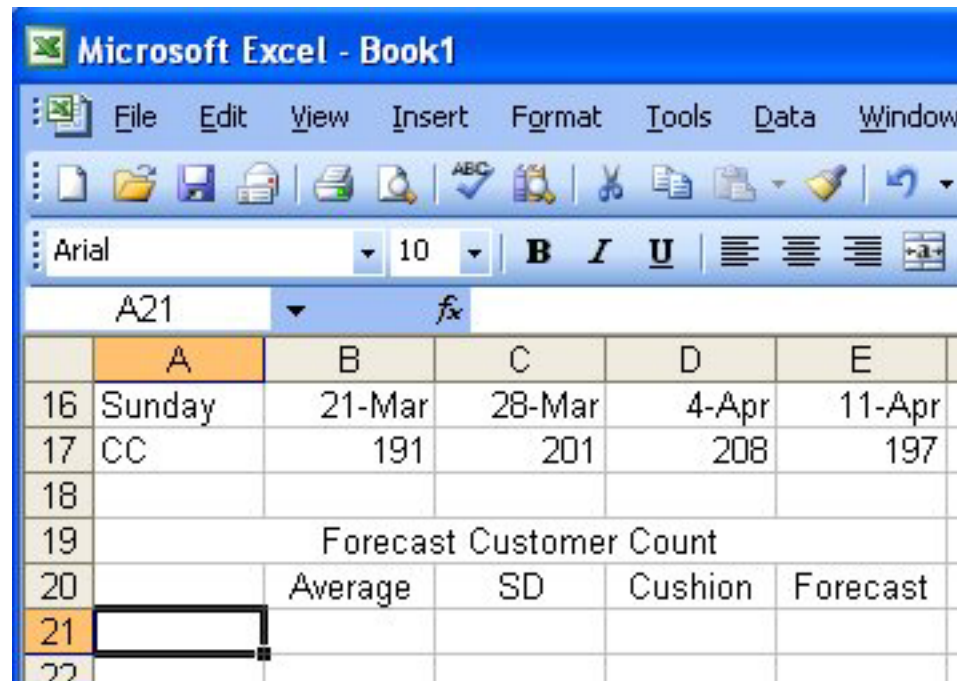
Merge and center A19 to E19, Type Forecasted Customer Count

The screenshot shows the Microsoft Excel interface with the following data:

	A	B	C	D	E
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr
17	CC	191	201	208	197
18					
19	Forecast Customer Count				
20					
21					
22					
23					
24					
25					
26					
27					

The formula bar shows the formula for cell A19: `=Forecast Customer Count`. The cell A19 is selected, and the formula bar displays the text "Forecast Customer Count".

Type Average in cell B20
Type SD in cell C20
Type Cushion in cell D20
Type Forecast in cell E20



The screenshot shows the Microsoft Excel interface with the following data in the worksheet:

	A	B	C	D	E
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr
17	CC	191	201	208	197
18					
19	Forecast Customer Count				
20		Average	SD	Cushion	Forecast
21					
22					

Type Monday in cell A21
Highlight A21, Select the Fill Handle
(black box) and pull down to row 27

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window

Arial 10 B I U

A21 Monday

	A	B	C	D	E
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr
17	CC	191	201	208	197
18					
19	Forecast Customer Count				
20		Average	SD	Cushion	Forecast
21	Monday				
22					
23					
24					
25					
26					
27					
28		Sunday			
29					

In cell B21, type =Average (B5:F5)
or =Average (select B5 through F5
with the mouse and Enter.

	A	B	C	D	E	F
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr
5	CC	115	125	117	121	97
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr
7	CC	122	132	142	151	110
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr
9	CC	131	141	154	157	115
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr
11	CC	160	154	178	140	120
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr
13	CC	180	214	174	135	141
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr
15	CC	91	75	87	86	84
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr
17	CC	191	201	208	197	204
18						
19	Forecast Customer Count					
20		Average	SD	Cushion	Forecast	
21	Monday	=average(B5:F5				
22	Tuesday	AVERAGE(number1, [number2], ...)				

Repeat for Tuesday through Sunday

18					
19	Forecast Customer Count				
20		Average	SD	Cushion	Forecast
21	Monday	115			
22	Tuesday	131.4			
23	Wednesday	139.6			
24	Thursday	150.4			
25	Friday	168.8			
26	Saturday	84.6			
27	Sunday	200.2			
28					
29					

In cell C21, type =StDevP (B5:F5)
or = StDevP (select B5 through F5
with the mouse and Enter.

INDIRECT		=stdevp(B5:F5)				
	A	B	C	D	E	F
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr
5	CC	115	125	117	121	97
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr
7	CC	122	132	142	151	110
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr
9	CC	131	141	154	157	115
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr
11	CC	160	154	178	140	120
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr
13	CC	180	214	174	135	141
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr
15	CC	91	75	87	86	84
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr
17	CC	191	201	208	197	204
18						
19	Forecast Customer Count					
20		Average	SD	Cushion	Forecast	
21	Monday	115	=stdevp(B5:F5)			
22	Tuesday	131.4	STDEV(number1, [number2], ...)			
23	Wednesday	139.6				
24	Thursday	150.4				
25	Friday	168.8				
26	Saturday	84.6				
27	Sunday	200.2				

Repeat for Tuesday through Sunday

18					
19		Forecast Customer Count			
20		Average	SD	Cushion	Forecast
21	Monday	115.0	9.6		
22	Tuesday	131.4	14.4		
23	Wednesday	139.6	15.4		
24	Thursday	150.4	19.5		
25	Friday	168.8	28.7		
26	Saturday	84.6	5.3		
27	Sunday	200.2	5.8		
28					

In cell D21, type =C21/2 and Enter

18					
19		Forecast Customer Count			
20		Average	SD	Cushion	Forecast
21	Monday	115.0	9.6	=C21/2	
22	Tuesday	131.4	14.4		
23	Wednesday	139.6	15.4		
24	Thursday	150.4	19.5		
25	Friday	168.8	28.7		
26	Saturday	84.6	5.3		
27	Sunday	200.2	5.8		
28					

Highlight D21, Select the Fill Handle (black box) and pull down to row 27

17	CC	191	201	208	197	20.
18						
19	Forecast Customer Count					
20		Average	SD	Cushion	Forecast	
21	Monday	115.0	9.6	4.8		
22	Tuesday	131.4	14.4			
23	Wednesday	139.6	15.4			
24	Thursday	150.4	19.5			
25	Friday	168.8	28.7			
26	Saturday	84.6	5.3			
27	Sunday	200.2	5.8			
28						
29						

In cell E21, type =B21+D21 and Enter

18					
19		Forecast Customer Count			
20		Average	SD	Cushion	Forecast
21	Monday	115.0	9.6	4.8	=B21+D21
22	Tuesday	131.4	14.4	7.2	
23	Wednesday	139.6	15.4	7.7	
24	Thursday	150.4	19.5	9.7	
25	Friday	168.8	28.7	14.3	
26	Saturday	84.6	5.3	2.7	
27	Sunday	200.2	5.8	2.9	
28					

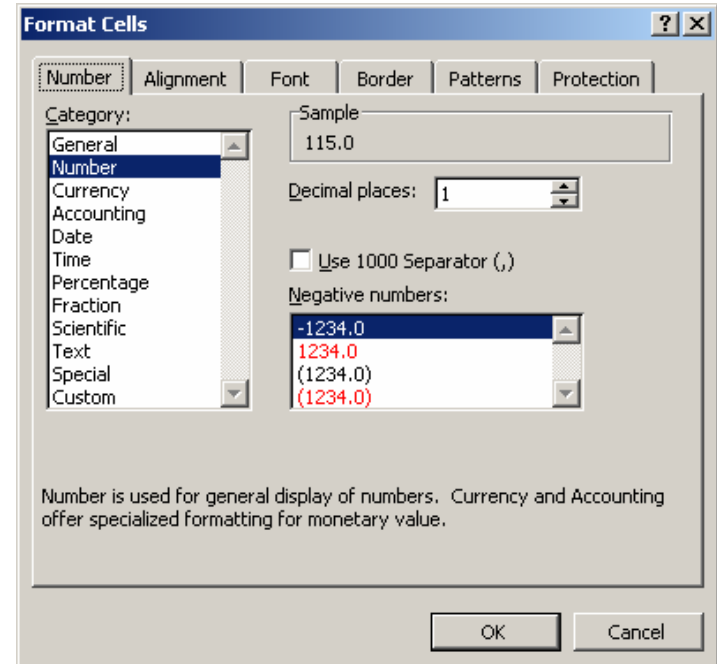
Highlight E21, Select the Fill Handle (black box) and pull down to row 27

18					
19		Forecast Customer Count			
20		Average	SD	Cushion	Forecast
21	Monday	115.0	9.6	4.8	119.8
22	Tuesday	131.4	14.4	7.2	138.6
23	Wednesday	139.6	15.4	7.7	147.3
24	Thursday	150.4	19.5	9.7	160.1
25	Friday	168.8	28.7	14.3	183.1
26	Saturday	84.6	5.3	2.7	87.3
27	Sunday	200.2	5.8	2.9	203.1
28					
29					

Highlight B21 through F27, right click on the blue area and select Format Cell.

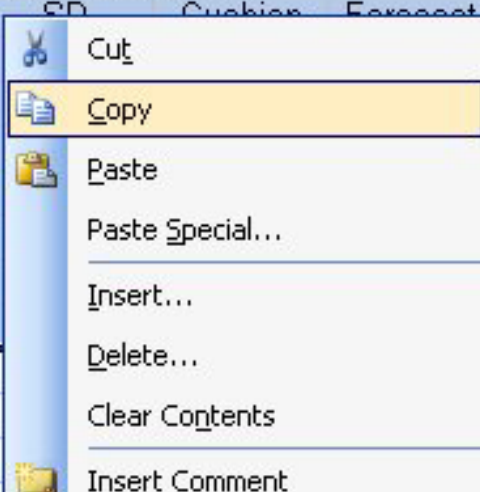
18					
19		Forecast Customer Count			
20		Average	SD	Cushion	Forecast
21	Monday	115.0	9.6	4.8	119.8
22	Tuesday	131.4	14.4	7.2	138.6
23	Wednesday	139.6	15.4	7.7	147.3
24	Thursday	150.4	19.5	9.7	160.1
25	Friday	168.8	28.7	14.3	183.1
26	Saturday	84.6	5.3	2.7	87.3
27	Sunday	200.2	5.8	2.9	203.1
28					

Select Number from the list on the Number Tab, reduce decimal places to 1



Highlight A19 to E27, right click on the blue area and select copy

	A19		fx Forecast Customer Count			
	A	B	C	D	E	F
17	CC	191	201	208	197	
18						
19	Forecast Customer Count					
20		Average	SD	Cookies	Forecast	
21	Monday	115.0				
22	Tuesday	131.4				
23	Wednesday	139.6				
24	Thursday	150.4				
25	Friday	168.8				
26	Saturday	84.6				
27	Sunday	200.2				
28						
29						
30						
31						



- Cut
- Copy
- Paste
- Paste Special...
- Insert...
- Delete...
- Clear Contents
- Insert Comment

Select cell H19 and Paste

The screenshot shows the Microsoft Excel interface with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr
15	CC	91	75	87	86	84		CC	195	187	156	141
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr
17	CC	191	201	208	197	204		CC	201	225	231	212
18												
19		Forecast Customer Count										
20		Average	SD	Cushion	Forecast							
21	Monday	115.0	9.6	4.8	119.8							
22	Tuesday	131.4	14.4	7.2	138.6							
23	Wednesday	139.6	15.4	7.7	147.3							
24	Thursday	150.4	19.5	9.7	160.1							
25	Friday	168.8	28.7	14.3	183.1							
26	Saturday	84.6	5.3	2.7	87.3							
27	Sunday	200.2	5.8	2.9	203.1							
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												

The context menu for cell H19 is open, showing the following options:

- Cut
- Copy
- Paste**
- Paste Special...
- Insert Copied Cells...
- Delete...
- Clear Contents
- Insert Comment
- Format Cells...
- Pick From Drop-down List...
- Add Watch
- Create List...
- Hyperlink...
- Look Up...

Select O19 and Paste

Microsoft Excel - Book1

File Edit View Insert Format Tools Data Window Help Adobe PDF PDF Professional 2

Type a question for help

Arial 10 B I U

O19 fx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday
15	CC	91	75	87	86	84		CC	195	187	156	181	201		CC
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday
17	CC	191	201	208	197	204		CC	201	225	231	218	103		CC
18															
19	Forecast Customer Count							Forecast Customer Count							
20		Average	SD	Cushion	Forecast				Average	SD	Cushion	Forecast			
21	Monday	115.0	9.6	4.8	119.8			Monday	156.0	15.9	8.0	164.0			
22	Tuesday	131.4	14.4	7.2	138.6			Tuesday	140.8	9.2	4.6	145.4			
23	Wednesday	139.6	15.4	7.7	147.3			Wednesday	201.2	12.5	6.3	207.5			
24	Thursday	150.4	19.5	9.7	160.1			Thursday	221.6	7.4	3.7	225.3			
25	Friday	168.8	28.7	14.3	183.1			Friday	253.0	23.6	11.8	264.8			
26	Saturday	84.6	5.3	2.7	87.3			Saturday	184.0	15.6	7.8	191.8			
27	Sunday	200.2	5.8	2.9	203.1			Sunday	195.6	47.4	23.7	219.3			
28															
29															
30															
31															
32															
33															
34															
35															
36															
37															
38															
39															

Context Menu:

- Cut
- Copy
- Paste
- Paste Special...
- Insert...
- Delete...
- Clear Contents
- Insert Comment
- Format Cells...
- Pick From Drop-down List...
- Add Watch
- Create List...
- Hyperlink...
- Look Up...

Finished Worksheet

2	Forecasting Customer Counts																			
3	Breakfast CC History					Lunch CC History					Dinner CC History									
4	Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr		Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr		Monday	15-Mar	22-Mar	29-Mar	5-Apr	12-Apr
5	CC	115	125	117	121	97		CC	135	142	157	168	178		CC	303	305	287	295	307
6	Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr		Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr		Tuesday	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr
7	CC	122	132	142	151	110		CC	142	154	126	137	145		CC	312	315	294	308	315
8	Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr		Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr		Wednesday	17-Mar	24-Mar	31-Mar	7-Apr	14-Apr
9	CC	131	141	154	157	115		CC	178	201	204	208	215		CC	320	334	305	309	324
10	Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr		Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr		Thursday	18-Mar	25-Mar	1-Apr	8-Apr	15-Apr
11	CC	160	154	178	140	120		CC	224	231	209	219	225		CC	331	345	329	301	319
12	Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr		Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr		Friday	19-Mar	26-Mar	2-Apr	9-Apr	16-Apr
13	CC	180	214	174	135	141		CC	245	215	264	287	254		CC	350	361	305	375	354
14	Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr		Saturday	20-Mar	27-Mar	3-Apr	10-Apr	17-Apr
15	CC	91	75	87	86	84		CC	195	187	156	181	201		CC	295	287	301	315	327
16	Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr		Sunday	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr
17	CC	191	201	208	197	204		CC	201	225	231	218	103		CC	200	215	199	204	209
18																				
19	Forecast Customer Count					Forecast Customer Count					Forecast Customer Count									
20		Average	SD	Cushion	Forecast			Average	SD	Cushion	Forecast			Average	SD	Cushion	Forecast			
21	Monday	115.0	9.6	4.8	119.8			Monday	156.0	15.9	8.0	164.0			Monday	299.4	7.4	3.7	303.1	
22	Tuesday	131.4	14.4	7.2	138.6			Tuesday	140.8	9.2	4.6	145.4			Tuesday	308.8	7.8	3.9	312.7	
23	Wednesday	139.6	15.4	7.7	147.3			Wednesday	201.2	12.5	6.3	207.5			Wednesday	318.4	10.4	5.2	323.6	
24	Thursday	150.4	19.5	9.7	160.1			Thursday	221.6	7.4	3.7	225.3			Thursday	325.0	14.6	7.3	332.3	
25	Friday	168.8	28.7	14.3	183.1			Friday	253.0	23.6	11.8	264.8			Friday	349.0	23.6	11.8	360.8	
26	Saturday	84.6	5.3	2.7	87.3			Saturday	184.0	15.6	7.8	191.8			Saturday	305.0	14.3	7.2	312.2	
27	Sunday	200.2	5.8	2.9	203.1			Sunday	195.6	47.4	23.7	219.3			Sunday	205.4	6.0	3.0	208.4	
28																				
29																				
30																				

- Save the spreadsheet as Customer Count 1
- Make a second Customer Count Spreadsheet from data on Customer Count 2 handout

Bibliography

- ¹ Ulm, Robert A. How Much to Buy.
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