

	C	D	E	F	G	H	I	J	K	L	M												
1	Click here to see what your answer should look like.																						
2																							
3	1 Introduction																						
4																							
5	<i>This spreadsheet lets you test (and possibly improve) your spreadsheet skills. The spreadsheet contains a set of exercises that you can work through. The exercises range from fairly easy to quite difficult.</i>																						
6																							
7																							
8																							
9	<i>You complete the exercises by designing formulae for cells that have a grey background (as does cell G22 below). A sample problem is shown next.</i>																						
10																							
11																							
12	Problem:- Calculate average profit																						
13																							
14	<i>An investment of \$6m is made today. The investment will generate a dividend of \$7.23m in one year's time and dividends thereafter increase at 826.0% per year forever. What is the IRR of this investment?</i>																						
15																							
16																							
17																							
18	<table border="1"> <tr> <td>Profit in period 1</td> <td>[\$m]</td> <td>6.15</td> </tr> <tr> <td>Profit in period 2</td> <td>[\$m]</td> <td>7.23</td> </tr> <tr> <td>Profit in period 3</td> <td>[\$m]</td> <td>8.26</td> </tr> <tr> <td>Average profit</td> <td>[\$m]</td> <td>7.21</td> </tr> </table>											Profit in period 1	[\$m]	6.15	Profit in period 2	[\$m]	7.23	Profit in period 3	[\$m]	8.26	Average profit	[\$m]	7.21
Profit in period 1	[\$m]	6.15																					
Profit in period 2	[\$m]	7.23																					
Profit in period 3	[\$m]	8.26																					
Average profit	[\$m]	7.21																					
19																							
20																							
21																							
22																							
23																							
24	<i>In this spreadsheet blue tag(s) on the left will turn yellow when your answers are correct.</i>																						
25																							
26	<i>To make the expand [+] and contract [-] icons on the index page work you need to have macros enabled.</i>																						
27																							
28																							
29	<i>Click on the following link for more information about this spreadsheet.</i>																						
30																							
31																							
32	More information																						
33																							
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35	Copyright (c) 2012 Tykoh Group Pty Ltd. All rights reserved.																						
36	www.tykoh.com																						

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4																																															
5	Consider the divisional revenue table below.																																														
6																																															
7	<table border="1"> <thead> <tr> <th>Division</th> <th>Month</th> <th>Revenue amount</th> </tr> </thead> <tbody> <tr> <td>North</td> <td>Jan</td> <td>150</td> </tr> <tr> <td>South</td> <td>Jan</td> <td>220</td> </tr> <tr> <td>East</td> <td>Feb</td> <td>370</td> </tr> <tr> <td>West</td> <td>Feb</td> <td>200</td> </tr> <tr> <td>North</td> <td>Feb</td> <td>500</td> </tr> <tr> <td>West</td> <td>Feb</td> <td>400</td> </tr> <tr> <td>South</td> <td>Mar</td> <td>700</td> </tr> <tr> <td>North</td> <td>Mar</td> <td>150</td> </tr> <tr> <td>East</td> <td>Apr</td> <td>200</td> </tr> <tr> <td>South</td> <td>Apr</td> <td>500</td> </tr> <tr> <td>North</td> <td>May</td> <td>160</td> </tr> </tbody> </table>			Division	Month	Revenue amount	North	Jan	150	South	Jan	220	East	Feb	370	West	Feb	200	North	Feb	500	West	Feb	400	South	Mar	700	North	Mar	150	East	Apr	200	South	Apr	500	North	May	160								
Division	Month	Revenue amount																																													
North	Jan	150																																													
South	Jan	220																																													
East	Feb	370																																													
West	Feb	200																																													
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South	Mar	700																																													
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South	Apr	500																																													
North	May	160																																													
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16																																															
17																																															
18																																															
19																																															
20	Find the total January revenue. You can use the SUMIF function for this. We'll give you the answer for this first question: It's: =SUMIF(E8:E18,"=Jan",F8:F18)																																														
21																																															
22																																															
23	<table border="1"> <tr> <td>January revenue</td> <td>370</td> </tr> </table>			January revenue	370																																										
January revenue	370																																														
24																																															
25	Find the revenue excluding the West division. You can use the SUMIF function for this.																																														
26																																															
27	<table border="1"> <tr> <td>Revenue excluding West</td> <td>2950</td> </tr> </table>			Revenue excluding West	2950																																										
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28																																															
29	2 Elaboration of preceding question - need to avoid 'hardcoding' the answer																																														
30																																															
31	Continuing with the preceding question: Find the total of the revenues in F8:F18 that individually exceed the figure in cell E35. You can use the SUMIF function for this but be sure not to 'hardcode' the number in cell E35 in your SUMIF formula.																																														
32																																															
33																																															
34																																															
35	<table border="1"> <tr> <td>Revenue</td> <td>200</td> </tr> </table>			Revenue	200	<- You can change this cell																																									
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36																																															
37	<table border="1"> <tr> <td>Total</td> <td>2690</td> </tr> </table>			Total	2690																																										
Total	2690																																														
39	Overall check																																														
50																																															
51	3 Summing top 'N' - A short question - but very difficult																																														
52																																															
53	Continuing with the preceding question. Find the total of the 'N' largest revenues in F8:F18. 'N' is selected in cell G56.																																														
54																																															
55																																															
56	<table border="1"> <tr> <td>N largest revenues:</td> <td>1</td> </tr> </table>			N largest revenues:	1	<- You can change this cell																																									
N largest revenues:	1																																														
57																																															
58	As part of your solution you can use the LARGE function. This question is difficult because some of the revenues are the same: The largest revenue is 700. The next largest revenues are 500 and 500 again. So, for example, the total of the two largest revenues is 1,200 and not 1,700.																																														
59																																															
60																																															
61																																															
62	<table border="1"> <tr> <td>Total of N largest:</td> <td>700</td> </tr> </table>			Total of N largest:	700																																										
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63	Overall check																																														
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	C	D	E	F	G	H	I	J	K	L	M	
78	4 Counting conditionally - not easy - but not too difficult either.											
79												
80	Each month a department's performance can be A,B,C or D. A history of performances is shown below											
81	in cells F84:L85.											
82												
83	Departmental performance											
84	Month	Jan	Feb	Mar	Apr	May	Jun	Jul				
85	Performance	D	C	B	B	C	A	B				
86												
87	We want to find the number of times the department's performance was between two levels. The levels are selected i											
88												
89												
90												
91						Number of B	<- You can change this cell					
92						and (includ A	<- You can change this cell					
93												
94	Number of times performance was between A ar						4					
95	Overall check											
192												
193												
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	I	J	K	L	M	N	O	P	Q	R	S																																											
1	Click here to see what your answer should look like.																																																					
2																																																						
3	1 Grouping by date - use SUMPRODUCT - a good illustration of SUMPRODUCT's power																																																					
4																																																						
5	Consider the cash flows shown below.																																																					
6																																																						
7	Cash flows																																																					
8	Date:	1-Jan-13	6-Jan-13	12-Jan-13	17-Jan-13	18-Jan-13	3-Feb-13	11-Feb-13																																														
9	Amount:	73	93	10	8	68	47	65																																														
10																																																						
11	Cell M13 below lets you select an interval over which cash flows will be grouped together.																																																					
12																																																						
13	Grouping interval (days): <input type="text" value="7"/> <- You can change this cell																																																					
14																																																						
15	In cells K21:Q21 below calculate the grouped cash flows. For example cell K21 should show the total of all amounts whose dates are greater than or equal to 1-Jan-13 and are less than 8-Jan-13. SUMPRODUCT would be a good function to use for this problem.																																																					
16																																																						
17																																																						
18																																																						
19	Grouped cash flows																																																					
20	Date:	1-Jan-13	8-Jan-13	15-Jan-13	22-Jan-13	29-Jan-13	5-Feb-13	12-Feb-13																																														
21	Amount:	166	10	76	0	47	65	0																																														
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37	2 Conditionally summing between dates - use COUNTIF or SUMPRODUCT - not trivial																																																					
38																																																						
39	The table below shows data relating to various contracts.																																																					
40																																																						
41	<table border="1"> <thead> <tr> <th>Contract code</th> <th>Contract value</th> <th>Maturity date</th> </tr> </thead> <tbody> <tr> <td>AZ12</td> <td>145</td> <td>7-Mar-13</td> </tr> <tr> <td>AZ99</td> <td>543</td> <td>22-Apr-13</td> </tr> <tr> <td>BG23</td> <td>245</td> <td>18-Jan-13</td> </tr> <tr> <td>HU87</td> <td>744</td> <td>15-Jan-13</td> </tr> <tr> <td>JK98</td> <td>72</td> <td>25-Apr-13</td> </tr> <tr> <td>JK99</td> <td>73</td> <td>17-Feb-13</td> </tr> <tr> <td>ML16</td> <td>564</td> <td>23-Feb-13</td> </tr> <tr> <td>PR82</td> <td>234</td> <td>12-Mar-13</td> </tr> </tbody> </table>			Contract code	Contract value	Maturity date	AZ12	145	7-Mar-13	AZ99	543	22-Apr-13	BG23	245	18-Jan-13	HU87	744	15-Jan-13	JK98	72	25-Apr-13	JK99	73	17-Feb-13	ML16	564	23-Feb-13	PR82	234	12-Mar-13	<table border="1"> <thead> <tr> <th colspan="8">Workspace (not really needed though)</th> </tr> </thead> <tbody> <tr> <td colspan="8" style="background-color: #cccccc;"></td> </tr> </tbody> </table>								Workspace (not really needed though)															
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50																																																						
51	Date 1:	<input type="text" value="18-Jan-13"/>	<- You can change this cell																																																			
52	Date 2:	<input type="text" value="10-Mar-13"/>	<- You can change this cell																																																			
53																																																						
54	In cell N58 below calculate the total value of contracts maturing between (and including) the dates in cells K51 and K52. Date 1 may be earlier or later (or the same as) Date 2. SUMPRODUCT or SUMIF would be a good function to use.																																																					
55																																																						
56																																																						
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58	Contract value maturing between (and including) Date 1 & Date 2: <input type="text" value="1027"/>																																																					
59	Overall check																																																					
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82	3 Conditionally summing - use an array & SUM & SUMIF - a fairly hard question.																																							
83																																								
84	Cells K88:L98 below list transactions made with certain counterparties.					Cell Q87 lets you select a certain set of counterparties.																																		
85																																								
86																																								
87	<table border="1"> <thead> <tr> <th>Counter-party</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>YHU</td> <td>1</td> </tr> <tr> <td>YHU</td> <td>2</td> </tr> <tr> <td>NJO</td> <td>4</td> </tr> <tr> <td>YHU</td> <td>8</td> </tr> <tr> <td>UIP</td> <td>16</td> </tr> <tr> <td>NJO</td> <td>32</td> </tr> <tr> <td>GHL</td> <td>64</td> </tr> <tr> <td>GHL</td> <td>128</td> </tr> <tr> <td>UIP</td> <td>256</td> </tr> <tr> <td>GHY</td> <td>512</td> </tr> <tr> <td>NJO</td> <td>1024</td> </tr> </tbody> </table>					Counter-party	Amount	YHU	1	YHU	2	NJO	4	YHU	8	UIP	16	NJO	32	GHL	64	GHL	128	UIP	256	GHY	512	NJO	1024	<table border="1"> <tr> <td>Counterparty set</td> <td>3</td> <td rowspan="2"> <- You can change this </td> </tr> <tr> <td>Counterparties</td> <td>GHY</td> </tr> </table>						Counterparty set	3	<- You can change this	Counterparties	GHY
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99																																								
100																																								
101	In cell L106 below calculate the total amount transacted with the counterparties shown in cells P90:P94. This is a fairly complicated question. You could use SUM and SUMIF in an array formula to solve the problem.																																							
102																																								
103																																								
104																																								
105	<table border="1"> <tr> <td>Total amount for selected counterparties.</td> <td>512</td> </tr> </table>					Total amount for selected counterparties.	512	<table border="1"> <tr> <td colspan="6">Workspace (not really needed though)</td> </tr> <tr> <td colspan="6" style="background-color: #cccccc;"> </td> </tr> </table>						Workspace (not really needed though)																										
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1	Click here to see what your answer should look like.												
2													
3	1 One-dimensional lookup - Easy - use VLOOKUP												
4	The table below shows revenues for various months.												
5													
6	Month		Revenue										
7	Jan		224										
8	Feb		299										
9	Mar		277										
10													
11	Into cell E15 put a formulae to calculate the revenue for the month chosen in cell F14. VLOOKUP would be a suitable function to use for this problem.												
12													
13													
14	Month		Feb										
15	Revenue		299										
16													
17	Overall check												
18													
19													
20													
21													
22													
23													
24													
25	2 Two-dimensional lookup - bit more difficult - can use VLOOKUP & MATCH												
26													
27	The table below shows revenues for various months and years.												
28													
29								Revenue for year					
30			2005		2006		2007		2008		2009		2010
31	Jan		224		226		239		293		293		207
32	Feb		299		217		261		225		266		275
33	Mar		277		224		235		285		241		264
34													
35	Find the revenue for the year and month chosen in cells F37 and F38.												
36													
37	Year		2007										
38	Month		Feb										
39	Revenue		261										
40													
41													
42	Overall check												
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56	3 Three-dimensional lookup - Harder - can use VLOOKUP, MATCH & INDIRECT												
57													
58	The tables below show "Section" revenues for various months and years.												
59													
60								Section 1					
61			2005		2006		2007		2008		2009		2010
62	Jan		224		226		239		293		293		207
63	Feb		299		217		261		225		266		275
64	Mar		202		228		212		201		242		207
65													
66								Section 2					
67			2005		2006		2007		2008		2009		2010
68	Jan		103		111		101		109		110		148
69	Feb		124		122		129		105		149		132
70	Mar		143		133		143		118		110		146
71													
72								Section 3					
73			2005		2006		2007		2008		2009		2010
74	Jan		430		448		441		511		513		503
75	Feb		547		461		519		435		564		539
76	Mar		488		494		498		437		462		499
77													
78													
79													
80													
81													
82													
83													
84													
85	Find the revenue for the year, month and section chosen in cells F90:F92. You might find it useful to refer to the sections by name. The topmost dotted area is section_1, the middle is section_2 and the lowest is section_3.												
86													
87													
88	Your formula should not have to be adjusted if more sections are added.												
89													
90	Year		2007										
91	Month		Feb										
92	Section		1										
93	Revenue		261										
94													
95													
96													

	C	D	E	F	G	H	I	J	K	L	M	N
97												
98	Overall check											
170												
171												
172	Copyright (c) 2012 Tykoh Group Pty Ltd. All rights reserved.											
173	www.tykoh.com											

[Click here to see what your answer should look like.](#)

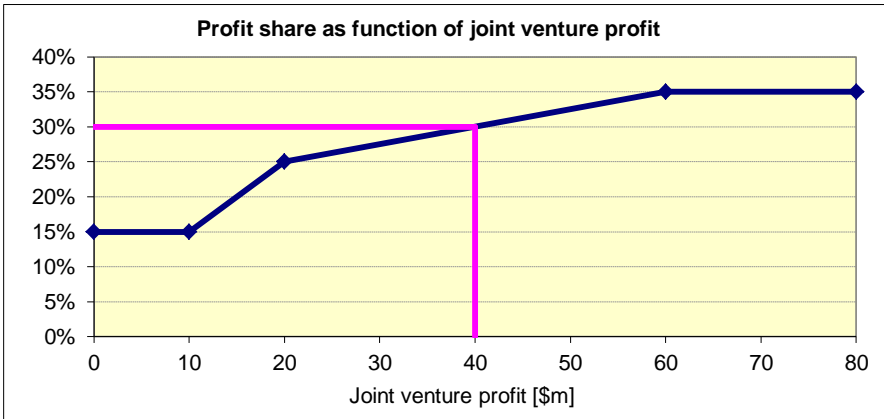
1 Interpolating - difficult - VLOOKUP isn't up to it - can use MATCH & OFFSET & others.

Your company has a joint venture with another company. The profits generated by the joint venture are shared between your company and the other company.

This is how your profit share is calculated: If the joint venture profit is less than \$10m your company's share is 15%. If the joint venture profit is \$20m your share is 25%. If the profit is more than \$60m your share is 35%. The profit share schedule is shown in the table below.

Index	[#]	1	2	3
Joint venture profit	[\$m]	<= 10	20	>= 60
Your share of profit	[%]	15%	25%	35%

For profits between \$10m and \$60m a sliding scale applies. This is illustrated in the chart below.



Consider a joint venture profit of \$40m (as shown by the pink vertical line on the chart above). The profit share is calculated this way: \$40m is midway between \$20m and \$60m. The profit share will then be midway between the profit share for \$20m [25%] and the profit share for \$60m [35%] i.e. it will be 30%.

Calculate the profit shares resulting from from the joint venture profits shown in cells M44:S44. You will need to use a combination of functions to solve this problem. Ones you could consider would include MATCH and OFFSET.

Date		1-Jun-11	1-Dec-11	1-Jun-12	1-Dec-12	1-Jun-13	1-Dec-13	1-Jun-14
Joint venture profit	[\$m]	9	10	14	15	54	60	65
Your profit share	[%]	15.00%	15.00%	19.00%	20.00%	33.50%	35.00%	35.00%
Your profit share	[\$m]	1.35	1.50	2.66	3.00	18.09	21.00	22.75

The colored area below is working space. You can do intermediate calculations in there.

2 Depreciation / variable length 'window' - A good example of use of OFFSET function

Assets have been purchased in previous years. 2005 is the first year an asset was bought. Cells N73:S74 list the years and amounts that were purchased. Each asset depreciates to zero value within the depreciation period specified in cell L71. Assets are purchased at the start of each year.

Assets depreciate in according to a "straight-line" schedule. So a \$5m asset depreciating over 5 years would generate a depreciation cost of \$1m per year beginning in the year it was purchased..

Calculate the depreciation cost each year in cells N75:S75. Try to make your formulae 'copy-and-pastable' i.e. use the same formula in each cell. Make sure your formulae don't refer to cells outside the area in which the asset

	I	J	K	L	M	N	O	P	Q	R	S	T																																																			
69	schedule is defined.																																																														
70																																																															
71	<table border="1"> <tr> <td>Depreciation period [yrs]</td> <td>2</td> <td colspan="10"><- You can change this cell</td> </tr> <tr> <td>Year</td> <td>[year]</td> <td>2005</td> <td>2006</td> <td>2007</td> <td>2008</td> <td>2009</td> <td>2010</td> <td colspan="5"></td> </tr> <tr> <td>Group 7.0 Assets acquired</td> <td>[\$m]</td> <td>4</td> <td>0</td> <td>2</td> <td>0</td> <td>0</td> <td>0</td> <td colspan="5"></td> </tr> <tr> <td>(Depreciation)</td> <td>[\$m]</td> <td>-2</td> <td>-2</td> <td>-1</td> <td>-1</td> <td>0</td> <td>0</td> <td colspan="5"></td> </tr> </table>												Depreciation period [yrs]	2	<- You can change this cell										Year	[year]	2005	2006	2007	2008	2009	2010						Group 7.0 Assets acquired	[\$m]	4	0	2	0	0	0						(Depreciation)	[\$m]	-2	-2	-1	-1	0	0					
Depreciation period [yrs]	2	<- You can change this cell																																																													
Year	[year]	2005	2006	2007	2008	2009	2010																																																								
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90	www.tykoh.com																																																														

	C	D	E	F	G	H	I	J	K	L	M
1	Click here to see what your answer should look like.										
2											
3	1 Comparing data sets - Easy to get it almost right - harder to get it completely right.										
4											
5	You can select one of three data sets by choosing 1,2 or 3 in cell E7 below.										
6											
7	Data set: <input type="text" value="1"/> <- You can change this cell										
8											
9	The selected data set is shown below (with a dotted background) in cells D12:G17.										
10											
11	Selected data set is 1				Reference set						
12	0.504630 0.690854 0.130354 0.304643				0.504630 0.690854 0.130354 0.304643						
13	0.854082 0.967712 0.098941 0.154331				0.854082 0.967712 0.098941 0.154331						
14	0.593255 0.978210 0.339026 0.524566				0.593255 0.978210 0.339026 0.524566						
15	0.627265 0.710125 0.421600 0.157712				0.627265 0.710125 0.421600 0.157712						
16	0.835484 0.658092 0.409358 0.471525				0.835484 0.658092 0.409358 0.471525						
17	0.079000 0.009540 0.208529 0.781042				0.079000 0.009540 0.208529 0.781042						
18											
19	You need to check whether each cell in the selected data set is the same as the corresponding cell in the 'Reference set' in cells I12:L17. [Differences between the selected data set and the reference data set are highlighted in purple.]										
20											
21											
22											
23	If all of the cells in the selected data set are the same as the corresponding cells in the reference set then cell E26 below should show 'Same'. If any differ the cell should show 'Differ'.										
24											
25											
26	Check: <input type="text" value="Same"/>										
27											
28	<input type="text" value="Overall check"/>										
29											
30	2 Detecting duplicates - Try to do it in a single cell - but several is ok too										
31											
32											
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73											
74											
75	You can select one of five data sets by choosing 1,2,3,4 or 5 in cell E77 below.										
76											
77	Data set: <input type="text" value="3"/> <- You can change this cell										
78											
79	Workspace (not really needed though)										
80											
81											
82											
83											
84											
85											
86											
87	In cell E91 below put a formula to check whether the cells in the chosen data set contain any duplicates. If duplicates are found the formula should return 'Duplicate'. If no duplicates are found the formula should return 'Ok'.										
88											
89											
90											
91	Duplicates? <input type="text" value="Duplicate"/>										
92											
93	<input type="text" value="Overall check"/>										
94											
95											
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	C	D	E	F	G	H	I	J	K	L	M
106	3 Mean / average - Can use SUM, SUMPRODUCT, PRODUCT to solve this.										
107											
108	An investment's yearly growth is monitored and recorded. The table below in cells E114:F125 shows										
109	how often various yearly growths occurred. Calculate the average / arithmetic yearly growth. Also										
110	calculate the compound average growth rate (CAGR) [i.e. the geometric average rate].										
111											
112											
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130											
131											
132											

Yearly growth	Frequency
-5%	1
-4%	4
-3%	0
-2%	2
-1%	3
0%	1
1%	4
2%	5
3%	3
4%	1
5%	2
6%	1

Average yearly growth	0.56%
CAGR	0.51%

Working

	H	I	J	K	L	M	N	O	P	Q	R																												
1	Click here to see what your answer should look like.																																						
2																																							
3	1 Dividend policy - easy - using IF statements.																																						
4																																							
5	The dividend payout policy of a company is this: Dividends paid are 50% of NPAT (net profit after taxes)																																						
6	if NPAT is positive and are zero otherwise. Calculate the dividends paid (represent them as negative																																						
7	numbers).																																						
8																																							
9	<table border="1"> <thead> <tr> <th>Year</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>NPAT</td> <td>120</td> <td>20</td> <td>-20</td> <td>200</td> <td>210</td> <td>260</td> </tr> <tr> <td>(Dividend)</td> <td>(60)</td> <td>(10)</td> <td>-</td> <td>(100)</td> <td>(105)</td> <td>(130)</td> </tr> </tbody> </table>											Year	2010	2011	2012	2013	2014	2015	NPAT	120	20	-20	200	210	260	(Dividend)	(60)	(10)	-	(100)	(105)	(130)							
Year	2010	2011	2012	2013	2014	2015																																	
NPAT	120	20	-20	200	210	260																																	
(Dividend)	(60)	(10)	-	(100)	(105)	(130)																																	
10																																							
11																																							
12																																							
13	The dividend payout policy is changed: Dividends paid are 50% of NPAT if NPAT is between 0 and 200,																																						
14	55% if NPAT is greater than or equal to 200 and zero otherwise. Calculate the dividends paid.																																						
15																																							
16	<table border="1"> <thead> <tr> <th>Year</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>NPAT</td> <td>120</td> <td>20</td> <td>-20</td> <td>200</td> <td>210</td> <td>260</td> </tr> <tr> <td>(Dividend)</td> <td>(60)</td> <td>(10)</td> <td>-</td> <td>(110)</td> <td>(116)</td> <td>(143)</td> </tr> </tbody> </table>											Year	2010	2011	2012	2013	2014	2015	NPAT	120	20	-20	200	210	260	(Dividend)	(60)	(10)	-	(110)	(116)	(143)							
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(Dividend)	(60)	(10)	-	(110)	(116)	(143)																																	
17																																							
18																																							
19																																							
20	The policy is changed again: If NPAT is less than zero then dividends are paid from retained earnings.																																						
21	In that case dividends are the lesser of: 1) 20% of retained earnings, 2) 30. Calculate the dividends																																						
22	paid.																																						
23																																							
24	<table border="1"> <thead> <tr> <th>Year</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> </tr> </thead> <tbody> <tr> <td>NPAT</td> <td>120</td> <td>20</td> <td>(20)</td> <td>200</td> <td>(40)</td> <td>260</td> </tr> <tr> <td>Retained earnings</td> <td>80</td> <td>90</td> <td>120</td> <td>110</td> <td>160</td> <td>90</td> </tr> <tr> <td>(Dividend)</td> <td>(60)</td> <td>(10)</td> <td>(24)</td> <td>(110)</td> <td>(30)</td> <td>(143)</td> </tr> </tbody> </table>											Year	2010	2011	2012	2013	2014	2015	NPAT	120	20	(20)	200	(40)	260	Retained earnings	80	90	120	110	160	90	(Dividend)	(60)	(10)	(24)	(110)	(30)	(143)
Year	2010	2011	2012	2013	2014	2015																																	
NPAT	120	20	(20)	200	(40)	260																																	
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25																																							
26																																							
27																																							
28																																							
29	2 Thresholds - Need to use 'nested' IF statements - bit more complicated																																						
30																																							
31	An amount (in cell K36) is to be compared against two thresholds - an upper and lower one. The																																						
32	thresholds are defined in cells K34 and K35.																																						
33																																							
34	<table border="1"> <tbody> <tr> <td>Upper threshold:</td> <td>37</td> </tr> <tr> <td>Lower threshold:</td> <td>35</td> </tr> <tr> <td>Amount:</td> <td>38</td> </tr> </tbody> </table>											Upper threshold:	37	Lower threshold:	35	Amount:	38																						
Upper threshold:	37																																						
Lower threshold:	35																																						
Amount:	38																																						
35																																							
36																																							
37																																							
38	- If the amount is above the upper threshold then the comparison should return above																																						
39	- If the amount is below the lower threshold it should return below																																						
40	- If the amount is between (but not including) the thresholds it should return show within																																						
41	- If the amount is equal to the lower threshold it should return at lower																																						
42	- And if the amount is equal to the upper threshold it should return at upper																																						
43																																							
44	<table border="1"> <tbody> <tr> <td>Comparison result:</td> <td>above</td> </tr> </tbody> </table>											Comparison result:	above																										
Comparison result:	above																																						
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60	www.tykoh.com																																						

	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Click here to see what your answer should look like.												
2													
3	1 A fairly wordy problem. Need to 'translate' from English to Excel statements - IF, etc.												
4													
5	A business needs to model and manage its cash and line-of-credit positions. The business's cash management policy is as follows.												
6	If the business runs low on cash then it draws on lines of credit. If the business generates cash and has no outstanding lines of credit then cash is deposited into one of three accounts.												
7													
8													
9	The first deposit account is an at-call / cash account. If, however, the balance of that account rises to \$300,000 then any residual cash is deposited into callable-deposit-account #1. If the balance of callable-deposit-account #1 rises to \$500,000 then any residual cash is deposited into callable-deposit-account #2.												
10													
11													
12													
13	If more cash is required than is available in deposit accounts one or more line-of-credit facilities is drawn upon. There are three lines of credit. Line-of-credit #1 has a limit of \$600,000; Line-of-credit #2 has a limit of \$700,000 and Line-of-credit #3 provides any remaining required funds.												
14													
15													
16													
17	Line-of-credit #1 is drawn upon first. If more cash is required than is available from Line-of-credit #1 then Line-of-credit #2 is used.												
18	If more cash is required than is available from Line-of-credit #2 then Line-of-credit #3 is drawn on.												
19													
20	Cash required by the business is obtained from the sources below in this order:						Cash generated by the business is applied in the following order:						
21	Withdrawal from callable-deposit-account #2						Pay down any balance on line-of-credit #3						
22	Withdrawal from callable-deposit-account #1						Pay down any balance on line-of-credit #2						
23	Withdrawal from the cash account						Pay down any balance on line-of-credit #1						
24	Draw on line-of-credit #1						Deposit into the cash account						
25	Draw on line-of-credit #2						Deposit into callable-deposit-account #1						
26	Draw on line-of-credit #3						Deposit into callable-deposit-account #2						
27													
28													
29	Determine the account balances for each period. All accounts initially have a zero balance.												
30													
31	Max in cash account	[\$'000]		300									
32	Max in callable-deposit-account #1	[\$'000]		500									
33	Max line-of-credit #1 balance	[\$'000]		600									
34	Max line-of-credit #2 balance	[\$'000]		700									
35													
36	Balance of accounts												
37													
38	Period	[#]	-	1	2	3	4	5	6				
39	Cash deposited/(withdrawn)	[\$'000]		900	(650)	(1,800)	2,000	(2,750)	1,200				
40	Cumulative cash	[\$'000]		900	250	(1,550)	450	(2,300)	(1,100)				
41													
42	Balance of cash accounts [positive numbers]												
43	Cash account	[\$'000]		300	250	-	300	-	-				
44	Callable-deposit-account #1	[\$'000]		500	-	-	150	-	-				
45	Callable-deposit-account #2	[\$'000]		100	-	-	-	-	-				
46													
47	Balance of line-of-credit accounts [negative numbers]												
48	Line-of-credit #1	[\$'000]		-	-	(600)	-	(600)	(600)				
49	Line-of-credit #2	[\$'000]		-	-	(700)	-	(700)	(500)				
50	Line-of-credit #3	[\$'000]		-	-	(250)	-	(1,000)	-				
51													
52	Determine the change in account balance in each period (i.e. change = this period's balance less last periods)												
53													
54	Net transactions												
55													
56	Period	[#]	-	1	2	3	4	5	6				
57	Cash generated/(needed)	[\$'000]		900	(650)	(1,800)	2,000	(2,750)	1,200				
58													
59	Cash accounts												
60	Cash account	[\$'000]		300	(50)	(250)	300	(300)	-				
61	Callable-deposit-account #1	[\$'000]		500	(500)	-	150	(150)	-				
62	Callable-deposit-account #2	[\$'000]		100	(100)	-	-	-	-				
63													
64	Lines-of-credit												
65	Line-of-credit #1	[\$'000]		-	-	(600)	600	(600)	-				
66	Line-of-credit #2	[\$'000]		-	-	(700)	700	(700)	200				
67	Line-of-credit #3	[\$'000]		-	-	(250)	250	(1,000)	1,000				
68													
69	Determine the sources and uses of funds for each period. All numbers should be positive.												
70													
71	Sources and Uses of funds												

	H	I	J	K	L	M	N	O	P	Q	R	S	T
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Period	Period	1	2	3	4	5	6
Sources	[#]	-	1	2	3	4	5
Positive cash flow	[\$'000]	900	-	-	2,000	-	1,200
Withdrawal from cash account	[\$'000]	-	50	250	-	300	-
Withdrawal from callable-deposit #1	[\$'000]	-	500	-	-	150	-
Withdrawal from callable-deposit #2	[\$'000]	-	100	-	-	-	-
Withdrawal from line-of-credit #1	[\$'000]	-	-	600	-	600	-
Withdrawal from line-of-credit #2	[\$'000]	-	-	700	-	700	-
Withdrawal from line-of-credit #3	[\$'000]	-	-	250	-	1,000	-
Uses							
Negative cash flow	[\$'000]	-	650	1,800	-	2,750	-
Deposit to cash account	[\$'000]	300	-	-	300	-	-
Deposit to callable-account #1	[\$'000]	500	-	-	150	-	-
Deposit to callable-account #2	[\$'000]	100	-	-	-	-	-
Deposit to line-of-credit #1	[\$'000]	-	-	-	600	-	-
Deposit to line-of-credit #2	[\$'000]	-	-	-	700	-	200
Deposit to line-of-credit #3	[\$'000]	-	-	-	250	-	1,000

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[Click here to see what your answer should look like.](#)

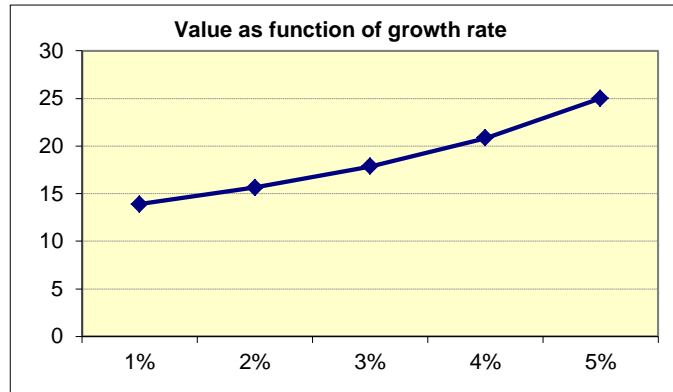
1 Basics of using data tables

Cells G7:G9 below define inputs to a very simple valuation function in cell G11.

Growth rate [g]	4%
Discount rate [r]	10%
Next dividend [D]	1.25
Value [=D/(r-g)]	20.83

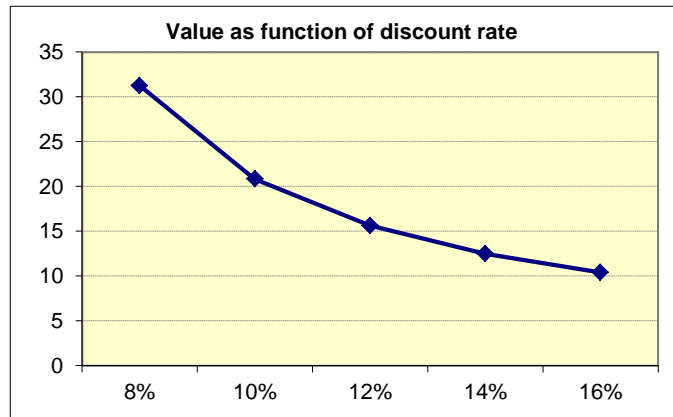
Complete the data table below to show value as a function of growth rates from 1% through to 5%. [You need only to fill out the cells that have a blue/gray background - you don't need to put anything into the uncolored cells in F19:F23].

Growth rate	Value
	20.83
1%	13.89
2%	15.63
3%	17.86
4%	20.83
5%	25.00



Continuing with the example above - complete the data table below to show value for discount rates of 8%, 10%, 12%, 14% & 16%.

Discount rate	Value
	20.83
8%	31.25
10%	20.83
12%	15.63
14%	12.50
16%	10.42

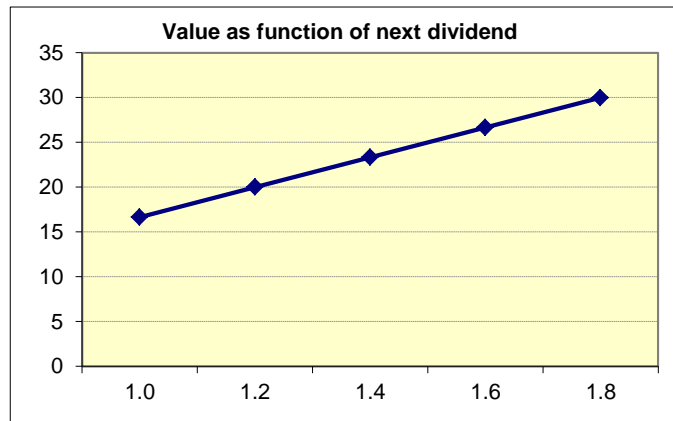


Continuing with the example above - complete the data table below to show value for dividends of 1.0, 1.2, 1.4, 1.6 and 1.8.

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Next dividend	Value
	20.83
1.0	16.67
1.2	20.00
1.4	23.33
1.6	26.67
1.8	30.00



2 Three scenarios - simple application of a data table

The table below shows three growth scenarios: "Optimistic", "Neutral" and "Pessimistic".

Scenario		Growth rate per year					
Number	Name	2010	2011	2012	2013	2014	2015
1	Optimistic		2.0%	3.0%	3.5%	4.0%	4.0%
2	Neutral		1.5%	1.5%	2.0%	2.0%	2.0%
3	Pessimistic		-1.0%	-1.0%	0.0%	0.0%	0.0%

Cell G80 below lets you choose one of the three scenarios.

Chosen scenario: <- You can change this cell

Cells H85:L86 below show the yearly growth rates for the chosen scenario.

Growth rate for chosen scenario [Neutral]					
2011	2012	2013	2014	2015	
1.5%	1.5%	2.0%	2.0%	2.0%	

In cells G91:L92 below a revenue projection is made using the chosen scenario.

Revenue projection for chosen scenario [Neutral]					
2011	2012	2013	2014	2015	
1,000	1,015	1,030	1,051	1,072	1,093

Complete the data table below in cells F97:G100 to show the 2015 revenue for all three scenarios.

Scenario	2015 revenue
Optimistic	1,176
Neutral	1,093
Pessimistic	980

	C	D	E	F	G	H	I	J	K	L	M																																																
1	Click here to see what your answer should look like.																																																										
2																																																											
3	1 Scenarios - Easy example																																																										
4																																																											
5	Cells I17:K21 (highlighted with dots below) define three different scenarios.																																																										
6																																																											
7	Cell G9 lets you choose one of the scenarios.																																																										
8																																																											
9	Choose a scenario >>>>>>>>>>>> 2 <- You can change this cell																																																										
10																																																											
11	Cells G17:G21 need to show the chosen scenario. Put formulae into those cells to show the chosen scenario. Design your formulae so that the formulae don't need to be changed if more scenarios are later added to the right of scenario 3.																																																										
12																																																											
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15	<table border="1"> <thead> <tr> <th>Scenario parameters</th> <th>Chosen scenario</th> <th colspan="3">Scenario 1 Scenario 2 Scenario 3</th> </tr> </thead> <tbody> <tr> <td>Growth rate (high growth phase)</td> <td>5%</td> <td>5%</td> <td>5%</td> <td>5%</td> </tr> <tr> <td>Growth rate (low growth phase)</td> <td>4%</td> <td>3%</td> <td>4%</td> <td>3%</td> </tr> <tr> <td>Number periods high growth</td> <td>5</td> <td>4</td> <td>5</td> <td>4</td> </tr> <tr> <td>Discount rate</td> <td>12%</td> <td>12%</td> <td>12%</td> <td>13%</td> </tr> <tr> <td>Terminal value multiple</td> <td>11</td> <td>11</td> <td>11</td> <td>10</td> </tr> </tbody> </table>											Scenario parameters	Chosen scenario	Scenario 1 Scenario 2 Scenario 3			Growth rate (high growth phase)	5%	5%	5%	5%	Growth rate (low growth phase)	4%	3%	4%	3%	Number periods high growth	5	4	5	4	Discount rate	12%	12%	12%	13%	Terminal value multiple	11	11	11	10																		
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61	www.tykoh.com																																																										

[Click here to see what your answer should look like.](#)

1 Paying down a loan - has a twist - avoid circular references - they're not needed here

A loan has to be paid off. The initial outstanding loan balance is \$1,000,000. For a number of periods (defined in cell N15) no interest or principal payments are required. During that time interest is capitalised (i.e. it is added to the outstanding principal).

After the interest-free period has passed the loan is paid off in equal installments. Calculate the interest and principal payments in the table below. Useful functions for this problem are IPMT and PPMT.

Item	Units	Value	
Interest rate	[%]	12%	
Opening principal	[\$'000]	1,000	
Number interest free periods	[#]	2	<- You can change this cell
Term	[#]	6	
Principal to be repaid	[\$'000]	1,254.40	<- i.e. The principal that must be repaid at the end of the interest free period.

Period number	[#]	1	2	3	4	5	6	
Interest								
(Interest payment)	[\$'000]	-	-	(150.53)	(119.03)	(83.76)	(44.25)	<- negative number
Principal								
Opening principal outstanding	[\$'000]	1,000.00	1,120.00	1,254.40	991.94	697.98	368.74	
Capitalised interest	[\$'000]	120.00	134.40	-	-	-	-	
(Principal payment)	[\$'000]	-	-	(262.46)	(293.96)	(329.23)	(368.74)	<- negative number
Closing principal outstanding	[\$'000]	1,120.00	1,254.40	991.94	697.98	368.74	-	
(NPV of Principal Payments)	[\$'000]	(747.27)						<- negative number
(NPV of Interest Payments)	[\$'000]	(252.73)						<- negative number
(NPV of Total Payments)	[\$'000]	(1,000.00)						<- negative number

Overall check

2 A good test of your grasp of the concepts underlying the NPV & PMT family of functions.

A business intends to develop two projects. The projects' cash needs are as follows: Project Alpha will require \$2m per year in years 4 through 6 (inclusive) and Project Beta will require \$3m per year in years 5 through 7 (inclusive).

In the period before the first project begins the business needs to build up enough cash in a reserve account to fund the two projects in the subsequent years. In each of the years 1 through 3 a fixed amount will be deposited into the reserve account.

So - in years 1 through 3 the business will deposit a fixed amount into the reserve account. In years 4 through 7 it will withdraw cash as required to fund projects Alpha and Beta.

Cash flows always occur on the last day of the year in this order: 1) Interest on the reserve account calculated and credited, 2) deposit (if any) made and 3) withdrawal (if any) made.

Interest earned on the reserve account is 5% p.a. The business wants to have a zero cash balance in the account after the last withdrawal has been made. How much should the business deposit each year in years 1 through 3? Also calculate the account balance and interest earned in the table below.

Useful functions for this problem are NPV and PMT.

Interest rate [%] 5% <- You can change this cell

Year		1	2	3	4	5	6	7	
Opening balance	[\$'000]	-	4,196	8,601	13,227	11,889	7,483	2,857	
Deposit	[\$'000]	4,196	4,196	4,196	-	-	-	-	
Interest earned	[\$'000]	-	210	430	661	594	374	143	
(Project Alpha cost)	[\$'000]	-	-	-	(2,000)	(2,000)	(2,000)	-	<- negative number
(Project Beta cost)	[\$'000]	-	-	-	-	(3,000)	(3,000)	(3,000)	<- negative number
Closing balance	[\$'000]	4,196	8,601	13,227	11,889	7,483	2,857	-	

Working space

Overall check

	I	J	K	L	M	N	O	P	Q	R	S	T	U
115													
116	3 A more complex version of the above - avoid the solver - we want a solution that is automatic.												
117													
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162	1 NPV - When does it assume the first cash flow occurs? That leads to the answer.												
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173	2 XNPV - Which date does it value for? That leads to the answer.												
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1	Click here to see what your answer should look like.																										
2																											
3	1 Dates - generate date of first day in month for successive months - easy																										
4																											
5	Cell K9 below lets you select a date. To the right of that cell, in cells L9:S9, generate dates at monthly intervals. Each date should be the first day of the month. The first date generated should be in February.																										
6																											
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9	<table border="1"> <tr> <td>1-Jan-12</td> <td>1-Feb-12</td> <td>1-Mar-12</td> <td>1-Apr-12</td> <td>1-May-12</td> <td>1-Jun-12</td> <td>1-Jul-12</td> <td>1-Aug-12</td> <td>1-Sep-12</td> </tr> </table>											1-Jan-12	1-Feb-12	1-Mar-12	1-Apr-12	1-May-12	1-Jun-12	1-Jul-12	1-Aug-12	1-Sep-12							
1-Jan-12	1-Feb-12	1-Mar-12	1-Apr-12	1-May-12	1-Jun-12	1-Jul-12	1-Aug-12	1-Sep-12																			
10	^^ You can change cell K9.																										
11																											
12	Overall check																										
13																											
37	2 Dates - generate first business day in successive months - harder																										
38																											
39	Cell K43 below lets you generate a date. To the right of that cell, in cells M43:S43, generate the first business (i.e. non-weekend) dates in successive months. The first date should be in January.																										
40																											
41																											
42	<table border="1"> <tr> <td>Year</td> <td colspan="7">First business (i.e. non-weekend) date in successive months</td> </tr> <tr> <td>1-Jan-11</td> <td>3-Jan-11</td> <td>1-Feb-11</td> <td>1-Mar-11</td> <td>1-Apr-11</td> <td>2-May-11</td> <td>1-Jun-11</td> <td>1-Jul-11</td> </tr> </table>											Year	First business (i.e. non-weekend) date in successive months							1-Jan-11	3-Jan-11	1-Feb-11	1-Mar-11	1-Apr-11	2-May-11	1-Jun-11	1-Jul-11
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3	1 Sorting - dynamically - fairly easy																																																		
4																																																			
5	Cell F8 below lets you select a 'data set'. A data set - in this case - is a single column of seven numbers																																																		
6	and the selected data set is shown in cells F14:F20.																																																		
7																																																			
8	Data set <input type="text" value="2"/> <- You can change this cell																																																		
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10	In cells H14:H20 are formulae that show how you can dynamically sort the selected data set (sorting is																																																		
11	largest first through to smallest at end).																																																		
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13	<table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th>Index</th> <th>Data</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td></tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th>Sorted</th> </tr> </thead> <tbody> <tr><td>7</td></tr> <tr><td>6</td></tr> <tr><td>5</td></tr> <tr><td>4</td></tr> <tr><td>3</td></tr> <tr><td>2</td></tr> <tr><td>1</td></tr> </tbody> </table>											Index	Data	1	1	2	2	3	3	4	4	5	5	6	6	7	7	Sorted	7	6	5	4	3	2	1																
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34	A similar problem is described below. Cell F37 lets you choose a data set. The data set contains two																																																		
35	columns and is shown in cells F45:G51 below (shown with a dotted background).																																																		
36																																																			
37	Data set <input type="text" value="2"/> <- You can change this cell																																																		
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39	You need to sort the data set so that the first column is in descending order. The cells in the second																																																		
40	column should stayed 'paired' with their partners on the left. Cells L45:M51 show how your answer																																																		
41	should look. Your answer should go into cells I45:J51.																																																		
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43	<table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th>Index</th> <th>Data to sort</th> </tr> </thead> <tbody> <tr><td>1</td><td>1 201</td></tr> <tr><td>2</td><td>2 202</td></tr> <tr><td>3</td><td>3 203</td></tr> <tr><td>4</td><td>4 204</td></tr> <tr><td>5</td><td>5 205</td></tr> <tr><td>6</td><td>6 -106</td></tr> <tr><td>7</td><td>7 207</td></tr> </tbody> </table> <table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th>Sorted data</th> </tr> </thead> <tbody> <tr><td>7 207</td></tr> <tr><td>6 -106</td></tr> <tr><td>5 205</td></tr> <tr><td>4 204</td></tr> <tr><td>3 203</td></tr> <tr><td>2 202</td></tr> <tr><td>1 201</td></tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th>Your answer should look like this.</th> </tr> </thead> <tbody> <tr><td>7 207</td></tr> <tr><td>6 -106</td></tr> <tr><td>5 205</td></tr> <tr><td>4 204</td></tr> <tr><td>3 203</td></tr> <tr><td>2 202</td></tr> <tr><td>1 201</td></tr> </tbody> </table>											Index	Data to sort	1	1 201	2	2 202	3	3 203	4	4 204	5	5 205	6	6 -106	7	7 207	Sorted data	7 207	6 -106	5 205	4 204	3 203	2 202	1 201	Your answer should look like this.	7 207	6 -106	5 205	4 204	3 203	2 202	1 201								
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118	2 Sorting - dynamically - a small change to the preceding problem makes it much harder																																																		
119																																																			
120	In the preceding problem the numbers in the column being sorted were all distinct. In this elaboration of																																																		
121	that problem we allow duplicates in the sorting column. This makes the problem much more difficult.																																																		
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126	Data set <input type="text" value="3"/> <- You can change this cell																																																		
127																																																			
128	<table border="1" style="width: 100%;"> <thead> <tr> <th>Index</th> <th>Data to sort</th> <th>Sorted data</th> <th>Your answer should look like this</th> <th>Working space</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>9 1098</td> <td>87 1087</td> <td>87 1087</td> <td></td> </tr> <tr> <td>2</td> <td>87 1087</td> <td>87 1034</td> <td>87 1034</td> <td></td> </tr> <tr> <td>3</td> <td>45 78</td> <td>87 1000</td> <td>87 1000</td> <td></td> </tr> <tr> <td>4</td> <td>87 1034</td> <td>45 78</td> <td>45 78</td> <td></td> </tr> <tr> <td>5</td> <td>1 -1101</td> <td>9 1098</td> <td>9 1098</td> <td></td> </tr> <tr> <td>6</td> <td>87 1000</td> <td>8 1090</td> <td>8 1090</td> <td></td> </tr> <tr> <td>7</td> <td>8 1090</td> <td>1 -1101</td> <td>1 -1101</td> <td></td> </tr> </tbody> </table>											Index	Data to sort	Sorted data	Your answer should look like this	Working space	1	9 1098	87 1087	87 1087		2	87 1087	87 1034	87 1034		3	45 78	87 1000	87 1000		4	87 1034	45 78	45 78		5	1 -1101	9 1098	9 1098		6	87 1000	8 1090	8 1090		7	8 1090	1 -1101	1 -1101	
Index	Data to sort	Sorted data	Your answer should look like this	Working space																																															
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3	45 78	87 1000	87 1000																																																
4	87 1034	45 78	45 78																																																
5	1 -1101	9 1098	9 1098																																																
6	87 1000	8 1090	8 1090																																																
7	8 1090	1 -1101	1 -1101																																																
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139	Overall check										
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191	Copyright (c) 2012 Tykoh Group Pty Ltd. All rights reserved.										
192	www.tykoh.com										

	C	D	E	F	G	H	I	J	K	L	M																														
1	Click here to see what your answer should look like.																																								
2																																									
3	1 Detecting errors in a block of cells - harder than it looks																																								
4																																									
5	Cell F8 lets you select one of four data sets. Some of the data sets contain one or more (deliberate) errors and some are error-free. The selected data set is shown below with a dotted background.																																								
6																																									
7																																									
8	Choose data set >> <input type="text" value="1"/> <- You can change this cell																																								
9																																									
10	<table border="1"> <thead> <tr> <th colspan="5">Chosen data set [1]</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>72</td> <td>47</td> <td>88</td> <td></td> </tr> <tr> <td>84</td> <td>#DIV/0!</td> <td>22</td> <td>4</td> <td></td> </tr> <tr> <td>61</td> <td>13</td> <td>12</td> <td>21</td> <td></td> </tr> <tr> <td>6</td> <td>58</td> <td>62</td> <td>58</td> <td></td> </tr> <tr> <td>6</td> <td>14</td> <td>96</td> <td>90</td> <td></td> </tr> </tbody> </table>											Chosen data set [1]					10	72	47	88		84	#DIV/0!	22	4		61	13	12	21		6	58	62	58		6	14	96	90	
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17	You need to test whether the selected data set contains errors. The result of your test should be shown in cell F21. If there are one or more errors in the selected data set your formula should return 'Error' (without the quotes). If there are no errors your formula should return 'Ok' (without the quotes).																																								
18																																									
19																																									
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21	Status of data set 1: <input type="text" value="Error"/>																																								
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23																																									
24	<input type="button" value="Overall check"/>																																								
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55																																									
56	2 Lookup - Would be simple - but must generate a default value if the lookup fails.																																								
57																																									
58	The table below in cells D61:E63 specifies an interest rate that applies for various product codes.																																								
59																																									
60	<table border="1"> <thead> <tr> <th>Product code</th> <th>Applicable rate</th> </tr> </thead> <tbody> <tr> <td>BC12</td> <td>3.0%</td> </tr> <tr> <td>CD09</td> <td>4.0%</td> </tr> <tr> <td>BC11</td> <td>1.5%</td> </tr> </tbody> </table>											Product code	Applicable rate	BC12	3.0%	CD09	4.0%	BC11	1.5%																						
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BC12	3.0%																																								
CD09	4.0%																																								
BC11	1.5%																																								
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62																																									
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64																																									
65	Cell E67 lets you specify a product code.																																								
66																																									
67	Selected code <input type="text" value="BC12"/> <- You can change this cell																																								
68																																									
69	In cell E72 below put a formula that returns the applicable rate for the selected code. If the selected code does not appear in the table above then return a rate of 5%.																																								
70																																									
71																																									
72	Rate for selected code <input type="text" value="3.0%"/>																																								
73																																									
74																																									
75	<input type="button" value="Overall check"/>																																								
76																																									
86																																									
87																																									
88	Copyright (c) 2012 Tykoh Group Pty Ltd. All rights reserved.																																								
89	www.tykoh.com																																								