



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/31

Paper 3 Practical Test B

May/June 2017

MARK SCHEME

Maximum Mark: 80

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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This syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **15** printed pages.

Question	Answer	Marks
1	<p>Open the file 1731san1.png in a suitable application. Resize the image so that it is 704 x 528 pixels. Save the image with the filename 1731san2.png</p> <p>Image resized to 704 x 528 and saved with new filename 1731san2.png</p>	<p>1</p> <p>1 mark</p>
2	<p>Remove the right of the image to make it 230 pixels wide and 528 pixels high like this: Save the image with the filename 1731san3.png</p> <p>Resized to 230 x 528 pixels By removal of right 2/3</p>	<p>2</p> <p>1 mark 1 mark</p>
3	<p>Display the contents of your <i>html_1731</i> folder showing the folder name, image dimensions, all file names, extensions and file sizes.</p> <p>Folder created with 5 files copied, file sizes visible</p>	<p>1</p> <p>1 mark</p>
4	<p>Evaluate in your own words other changes that you could make to this image to make it more suitable for use in the web page.</p> <p>(4 from) –1 mark each Colour depth can be changed... From 16 bits/channel To 8 bits per channel Reduces storage space... ... and image transmission time... ...by saving in gif format ...by saving in jpg format ...save as jpeg with lower resolution</p>	<p>4</p> <p>4 marks</p>

Question	Answer	Marks									
5	<p>Create a web page called 1731links.htm</p> <p>This web page must work in all browsers and will have a table structure with visible borders and gridlines, as shown below.</p> <p>Text shown in bold must be entered onto your web page.</p> <p>The texts in italics are instructions you must do.</p> <p>Replace text in <chevrons> with answers/image/candidate details as instructed:</p> <div data-bbox="496 584 1131 1050" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;">Using hyperlinks <i>set in style h1</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; padding: 5px;"><i><Place image saved in step 2 here></i></td> <td style="width: 33%; padding: 5px;">The function of a hyperlink: <i>set in style h3</i></td> <td style="width: 33%; padding: 5px;"><i><Enter your answer to question 6 here></i> <i>set in style h2</i></td> </tr> <tr> <td style="width: 33%; padding: 5px;"></td> <td style="width: 33%; padding: 5px;">When used with a website, absolute and relative file paths can be explained as: <i>set in style h3</i></td> <td style="width: 33%; padding: 5px;"><i><Enter your answers to question 7 here></i> <i>set as a bulleted list with square bullet points</i></td> </tr> <tr> <td style="width: 33%; padding: 5px;"><i>add appropriate alternative text</i></td> <td colspan="2" style="padding: 5px;">Website created by: <name, Centre number, candidate number> <i>set in style h3</i></td> </tr> </table> </div> <p>Browser In browser 1 mark</p> <p>Table 3 columns and 4 rows borders visible 1 mark</p> <p>1st row Using hyperlinks as h1 1 mark colspan=3 1 mark</p> <p>2nd row 1st <td> rowspan=3 image 1731san3.png 1 mark Text The function of a hyperlink: 100% correct 1 mark</p> <p>3rd row Correct text in left cell 1 mark 3 answers as bulleted list 1 mark With square bullet points 1 mark</p> <p>4th row colspan=2 1 mark Correct text in right cell 1 mark</p> <p>2nd column Rows 2–4 set as style h3 1 mark</p> <p>Appropriate alt text for image 1 mark</p> <p>In the stylesheet settings (or embedded css) li { } list-style-type:square 1 mark</p>	<i><Place image saved in step 2 here></i>	The function of a hyperlink: <i>set in style h3</i>	<i><Enter your answer to question 6 here></i> <i>set in style h2</i>		When used with a website, absolute and relative file paths can be explained as: <i>set in style h3</i>	<i><Enter your answers to question 7 here></i> <i>set as a bulleted list with square bullet points</i>	<i>add appropriate alternative text</i>	Website created by: <name, Centre number, candidate number> <i>set in style h3</i>		17
<i><Place image saved in step 2 here></i>	The function of a hyperlink: <i>set in style h3</i>	<i><Enter your answer to question 6 here></i> <i>set in style h2</i>									
	When used with a website, absolute and relative file paths can be explained as: <i>set in style h3</i>	<i><Enter your answers to question 7 here></i> <i>set as a bulleted list with square bullet points</i>									
<i>add appropriate alternative text</i>	Website created by: <name, Centre number, candidate number> <i>set in style h3</i>										
6	<p>Replace the text <Enter your answer to question 6 here> with a description in your own words of the function of a hyperlink. Set this as style h2.</p> <p>To navigate from one place/page to another 1 mark</p> <p>Text for answer set to h2 1 mark</p>	2									

Question	Answer	Marks
7	<p>Replace the text <Enter your answers to question 7 here> with a bulleted list in your own words of three or more items explaining the terms relative file path and absolute file path.</p> <p>(3 from): 1 mark each</p> <ul style="list-style-type: none"> Relative path points to current folder ... so relative links uploaded to server will work Absolute file path points to a location on a storage device ...so links uploaded to server unlikely to work (unless same structure) <p style="text-align: right;">3 marks</p>	3
8	<p>Attach the stylesheet tab1731.css to your webpage</p> <p>tab1731.css attached</p> <p>Head and body syntax correct</p>	2

Question	Answer	Marks																																																																		
9	<p>A trainee has started to create a second stylesheet to be added to the web page. The stylesheet is not finished and contains a number of errors.</p> <p>Open the stylesheet st1731.css in a suitable software package. The web page and stylesheet must work in any browser and use the most efficient method. All colour codes are in hexadecimal. Make sure your stylesheet contains no html. The specifications for this stylesheet are:</p> <p>Correct and complete this stylesheet using the information above.</p> <p>Add your name, Centre number and candidate number as a comment at the start of the stylesheet.</p> <p>Save this stylesheet in your 1731_html folder. Use the filename st1731 followed by your candidate number, e.g. st17319999.css</p> <p>Attach this stylesheet to your webpage so that it has a higher priority than the stylesheet saved in step 8.</p> <table border="0" data-bbox="304 920 1326 1659"> <tr> <td>Comments</td> <td>/* Candidate details */</td> <td>1 mark</td> </tr> <tr> <td>table { }</td> <td>width:650px</td> <td>1 mark</td> </tr> <tr> <td></td> <td>border:5px</td> <td>1 mark</td> </tr> <tr> <td></td> <td>border-collapse:collapse</td> <td>1 mark</td> </tr> <tr> <td></td> <td>padding-top:6px; padding-bottom:6px</td> <td>1 mark</td> </tr> <tr> <td></td> <td>padding-left:4px; padding right:4px</td> <td>1 mark</td> </tr> <tr> <td>td { }</td> <td>border:2px</td> <td>1 mark</td> </tr> <tr> <td>table,td { }</td> <td>border:solid dark green (#005000)</td> <td>1 mark</td> </tr> <tr> <td></td> <td>These 2 elements in joint section</td> <td>1 mark</td> </tr> <tr> <td>h1 { }</td> <td>color: #005000</td> <td>1 mark</td> </tr> <tr> <td></td> <td>font-family: Palatino,</td> <td>1 mark</td> </tr> <tr> <td></td> <td>,Times New Roman</td> <td>1 mark</td> </tr> <tr> <td></td> <td>In speech marks</td> <td>1 mark</td> </tr> <tr> <td></td> <td>,Times</td> <td>1 mark</td> </tr> <tr> <td></td> <td>,serif</td> <td>1 mark</td> </tr> <tr> <td></td> <td>font-size:36px</td> <td>1 mark</td> </tr> <tr> <td>h2,h3,li { }</td> <td>font-size:16px</td> <td>1 mark</td> </tr> <tr> <td>font-size</td> <td>one style line used for these 3 styles</td> <td>1 mark</td> </tr> <tr> <td>h2 { }</td> <td>text-align:left</td> <td>1 mark</td> </tr> <tr> <td>h3 { }</td> <td>text-align:center</td> <td>1 mark</td> </tr> <tr> <td>CSS syntax</td> <td>Must have ; between properties</td> <td>1 mark</td> </tr> <tr> <td>st1731?????.css</td> <td>attached below tab173.css</td> <td>1 mark</td> </tr> </table>	Comments	/* Candidate details */	1 mark	table { }	width:650px	1 mark		border:5px	1 mark		border-collapse:collapse	1 mark		padding-top:6px; padding-bottom:6px	1 mark		padding-left:4px; padding right:4px	1 mark	td { }	border:2px	1 mark	table,td { }	border:solid dark green (#005000)	1 mark		These 2 elements in joint section	1 mark	h1 { }	color: #005000	1 mark		font-family: Palatino,	1 mark		,Times New Roman	1 mark		In speech marks	1 mark		,Times	1 mark		,serif	1 mark		font-size:36px	1 mark	h2,h3,li { }	font-size:16px	1 mark	font-size	one style line used for these 3 styles	1 mark	h2 { }	text-align:left	1 mark	h3 { }	text-align:center	1 mark	CSS syntax	Must have ; between properties	1 mark	st1731?????.css	attached below tab173.css	1 mark	22
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Question	Answer	Marks
10	<p>Open and examine the file 1731emp.csv in a spreadsheet package.</p> <p>Save this file as a spreadsheet with the filename 1731emp and your candidate number, for example, 1731emp9999</p> <p>Place your name, Centre number and candidate number, centre aligned in the header of the page.</p> <p>On the left in the footer add the text Last edited on followed by today's date (automated) and time (automated).</p> <p>Name and numbers in centre of header 1 mark Last edited on followed by an automated <date> and <time> on the left in the footer 1 mark</p>	2
11	<p>Merge cells A1 to G1.</p> <p>Format this cell so that:</p> <ul style="list-style-type: none"> • text is centre aligned with a white, 24 point, sans-serif font • it has a dark green background colour. <p>Merge cells A1 to G1, centre aligned 1 mark White 24 point sans-serif font 1 mark Dark green background 1 mark</p>	3
12	<p>Use cells A5 to B14 to create a named range called JC.</p> <p>Correct named range 1 mark</p>	1
13	<p>In cell D18 enter a function to look up the job description for this employee.</p> <p>Lookup used 1 mark Correct relative lookup reference – A18 1 mark Named range JC 1 mark Correct return column 2 1 mark ,False for correct only / sorted data 1 mark</p>	5
14	<p>In cell G18 use a formula to calculate the pay for this employee. This will look up the rate of pay from the Pay rates table and multiply it by the number of hours worked. This formula must include an absolute range, two relative references and must not include a named range.</p> <p>Lookup used 1 mark Correct relative lookup reference – C18 (relative reference) 1 mark Range \$D\$5:\$E\$8 set as absolute reference 1 mark Correct return column 2 (,false optional) 1 mark *F18 (relative reference) 1 mark</p>	5
15	<p>Replicate the formulae from steps 13 and 14 for all employee.</p> <p>Formulae replicated correctly 1 mark</p>	1

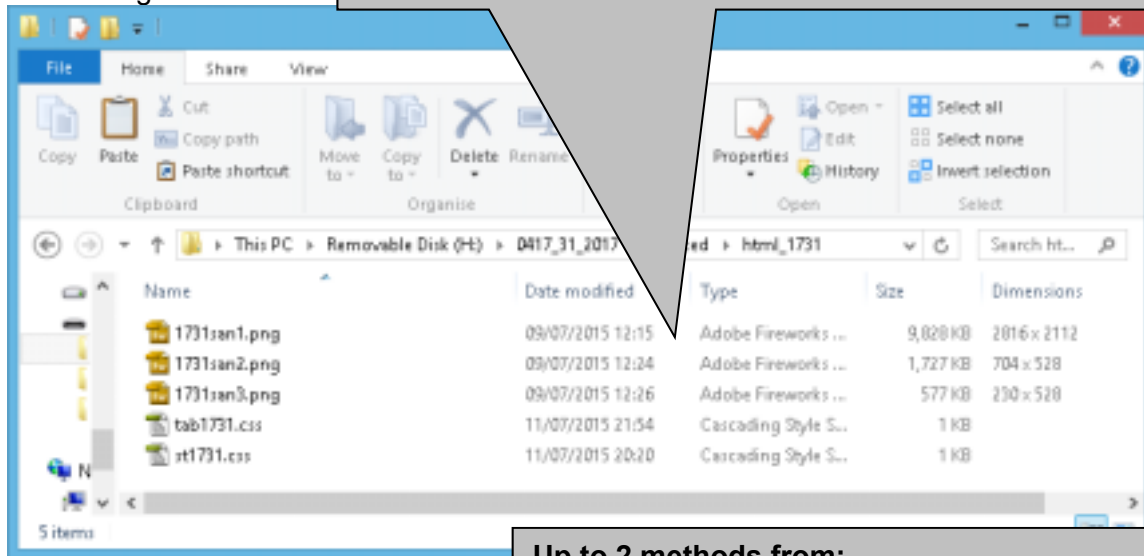
Question	Answer	Marks
16	<p>In cell F60 enter a function to calculate the average number of hours worked by the employees.</p> <p>Display this to the nearest whole number.</p> <p>=AVERAGE(F18:F58) displayed as an integer</p>	1 1 mark
17	<p>In cell G61 use a function to calculate the total weekly wage.</p> <p>=SUM(G18:G58)</p>	1 1 mark
18	<p>Apply appropriate formatting to your spreadsheet.</p> <p>Dollars applied with 2dp to all currency cells and appropriate cell alignment used</p>	1 1 mark
19	<p>Save and print the spreadsheet showing the formulae. Make sure:</p> <p>it is in landscape orientation it fits on a single page wide the row and column headings are displayed the contents of all cells are fully visible.</p> <p>Single landscape page, all visible Row and column headings displayed</p>	2 1 mark 1 mark
20	<p>Print the spreadsheet showing the values. Make sure:</p> <p>it is in portrait orientation it fits on a single page the row and column headings are not displayed the contents of all cells are fully visible.</p> <p>Fits single portrait page with no row or column headings, all visible</p>	1 1 mark
21	<p>Hide rows 3–15 inclusive. Hide rows 60 and 61.</p> <p>Rows hidden from the printout</p>	1 1 mark
22	<p>Extract only the employees where the job description includes developer and who work more or less than their contracted hours.</p> <p>Sort this data into ascending order of name.</p> <p>Print only this extract showing the values. Make sure the:</p> <p>printout fits on a single page contents of all cells are fully visible.</p> <p>Job contains developer and contract hours <> hours worked Sorted ascending on Name</p>	2 1 mark 1 mark

PUBLISHED

Evidence 1

Place image of folder screenshot here:

Screen shot Folder name, dimensions, extensions, file size 1 mark
 html_1731 1731san2.png resized to 704 x 528 1 mark
 1731san3.png resized to 230 x 528 1 mark



Up to 2 methods from:
 Colour depth can be changed...
 ...from 16 bits per channel...
 ...to 8 bits per channel
 Saving in gif format
 Saving in jpeg format
Up to 3 from:
 Reduces storage space required
 Reduces image transmission time
 Reduced image quality may not be suitable for web page
Max 4 marks

Evidence 2

Place your evaluation here:

The colour depth of the image could be reduced to 8 bits per channel. This would allow the image to be stored in a gif or jpeg format. The effect of this would be to reduce the storage space required for the image and hence its transmission time when downloaded on the internet. If it was saved in a jpeg format, the file size could be further reduced by reducing the image quality as you save the file.

Evidence 3

Place screenshot of your stylesheet

Comment	/* Candidate details */	1 mark
table	width:650px	1 mark
	border-width:5px	1 mark
	border-collapse:collapse	1 mark
	padding-top:6px; padding-bottom:6px	1 mark
	padding-left:4px; padding-right:4px	1 mark
td	border-width:2px	1 mark
table,td	solid dark green e.g. #005000	1 mark
	one style line used for these 2 styles	1 mark
h1	color: #005000	1 mark
	font-family: Palatino	1 mark
	,Times New Roman ...	1 mark
	...in speech marks	1 mark
	,Times	1 mark
	,serif	1 mark
	font-size:36px	1 mark
h2,h3,li	font-size:16px	1 mark
	one style line used for these 3 styles	1 mark
h2	text-align:left	1 mark
h3	text-align:center	1 mark
li	list-style-type:square	1 mark
CSS syntax	Must have ; between properties	1 mark

```

st17319999.css - Notepad
File Edit Format View Help
/* A Candidate, ZZ999, 9999

table {width:650px;
border:5px;
border-collapse:collapse;

td {border:2px;
padding:6px 4px;}

table,td {border:solid #005000;}

h1 {color:#005000;
font-family:Palatino,"Times New Roman",Times,serif;
font-size:36px}

h2,h3,li {font-size:16px}

h2 {text-align:left}

h3 {text-align:center}

li {list-style-type:square}
    
```

Browser	Screenshot in browser	1 mark
Table	3 columns & 4 rows borders visible	1 mark
1st row	Using hyperlinks as h1	1 mark
2nd row	image 1731san3.png Right 2/3 of image removed	1 mark
	Text The function of a hyperlink: Correct answer in correct cell	1 mark
	e.g. <i>Navigate from one place to another</i> as h2	1 mark
3rd row	Correct text in middle cell 3+ answers as list	1 mark
4th row	Website created by: & name & numbers	1 mark
2nd column	Rows 2 - 4 set as style h3 (3 from):	1 mark each

Evidence 4

Place screen shot evidence of your b



+63

Relative path points to current folder
Relative – links uploaded to server will retain the hierarchical structure and therefore work
Absolute file path points to a location on a storage device
Absolute – links uploaded to server unlikely to work unless same file/folder structure

Evidence 5

Place your html markup here

```

<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="tab1731.css">
<link rel="stylesheet" href="st17319999.css">
<title>0417 June 2107 paper 31</title>
</head>
<body>
<table>
<tr>
<td colspan=3><h1>Using hyperlinks</h1>
</td>
</tr>
<tr>
<td rowspan=3>

</td>

```

Stylesheet tab1731.css attached 1 mark
 st1731?????.css attached below tab1731.css 1 mark
 Head and body syntax correct 1 mark

colspan=3 1 mark

2nd row 1st <td> rowspan=3 1 mark

Image Appropriate alt text attributes 1 mark

```

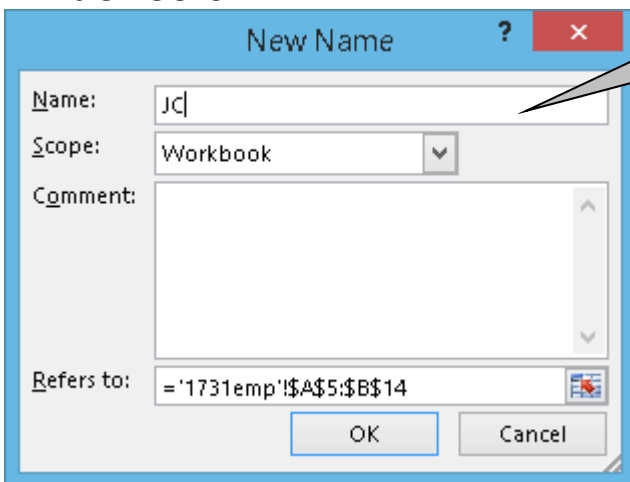
        <td><h3>The function of a hyperlink:</h3>
        </td>
        <td><h2>To move the user from one place to another page/ document/
place on the page.</h2>
        </td>
    </tr>
    <tr>
        <td><h3>When used with a website, absolute and relative file paths can
be explained as:</h3>
        </td>
        <td>
            <ul>
                <li>Relative path points to current folder</li>
                <li>Relative links uploaded to a server will work</li>
                <li>Absolute file path points to a location on a storage
device</li>
                <li>Links uploaded to server unlikely to work unless the host
computer has the same file/directory structure and filenames as the
computer used to create the webpage.</li>
            </ul>
        </td>
    </tr>
    <tr>
        <td colspan=2>
            <h3>Website created by: A Candidate, ZZ999, 9999</h3>
        </td>
    </tr>
</table>
</body>
</html>
    
```

Bulleted list visible (set) 1 mark

Row 4 colspan=2 1 mark

Evidence 6

JC Correct ranges and name 1 mark



Header Name & numbers - centre aligned 1 mark
 Footer **Last edited on** & date and time – left 1 mark

Job desc VLOOKUP (...) 1 mark
 Correct relative reference – A18 1 mark
 Correct named range - JC 1 mark
 Correct return column - 2 1 mark
 ,FALSE (or sorted JC range) 1 mark

Tawara Web - weekly pay calculation - week 1						
1						
2						
3	Job codes		Pay rates			
4	Job code	Job description	Pay code	Pay rate		
5	J	Javascript programmer	A	15		
6	V	Web developer	B	16		
7	W	Web designer	C	18.4		
8	S	SQL programmer	D	21.5		
9	G	Graphic designer				
10	P	PHP programmer				
11	M	Magento developer				
12	F	Front End developer CSS/HTML				
13	X	Junior Web developer				
14	Y	Junior Front End developer				
15						
16	Employees					
17	Job code	Name	Pay code	Job description	Contract hours	Hours worked
18	X	Henry Gale	A	=VLOOKUP(A18,JC,2,FALSE)	10	10
19	X	Kurtis Brown	A	=VLOOKUP(A19,JC,2,FALSE)	25	25
20	P	Clemantine Leadbetter	C	=VLOOKUP(A20,JC,2,FALSE)	25	25
21	G	Christine Hull	B	=VLOOKUP(A21,JC,2,FALSE)	25	15
22	Y	Karla Gree				
23	W	Fred Poole				
24	V	Ben Chalm				
25	V	Christophe				
26	W	Rio Patel				
27	M	Ruksana G				
28	X	Angela Akula	A	=VLOOKUP(A28,JC,2,FALSE)	38	38
29	P	Udoka Onyancha	C	=VLOOKUP(A29,JC,2,FALSE)	30	35
30	Y	Billy Green	A	=VLOOKUP(A30,JC,2,FALSE)	20	20
31	V	Wesley Smith	B	=VLOOKUP(A31,JC,2,FALSE)	25	25
32	V	Anthony Campbell	B	=VLOOKUP(A32,JC,2,FALSE)	25	0
33	V	Trevor Jones	B	=VLOOKUP(A33,JC,2,FALSE)	25	25

Pay Lookup used 1 mark
 Correct relative lookup reference – C18 1 mark
 Correct absolute range - \$D\$5:\$E\$8 1 mark
 Correct return column – 2 1 mark
 Multiplied by F18 (relative reference) 1 mark

A Candidate, ZZ999, 9999

	A	B	C	D	E	F	G
34	S	Jasmine Gunn	C	=VLOOKUP(A34,JC,2,FALSE)	30	30	=VLOOKUP(C34,\$D\$5:\$E\$8,2,FALSE)*F34
35	Y	Brian Wells	A	=VLOOKUP(A35,JC,2,FALSE)	25	25	=VLOOKUP(C35,\$D\$5:\$E\$8,2,FALSE)*F35
36	Y	David Reid	A	=VLOOKUP(A36,JC,2,FALSE)	25	35	=VLOOKUP(C36,\$D\$5:\$E\$8,2,FALSE)*F36
37	V	John Vercoe	B	=VLOOKUP(A37,JC,2,FALSE)	25	25	=VLOOKUP(C37,\$D\$5:\$E\$8,2,FALSE)*F37
38	W	Lauren Hall	B	=VLOOKUP(A38,JC,2,FALSE)	25	35	=VLOOKUP(C38,\$D\$5:\$E\$8,2,FALSE)*F38
39	J	Chloe Rhodes	C	=VLOOKUP(A39,JC,2,FALSE)	30	30	=VLOOKUP(C39,\$D\$5:\$E\$8,2,FALSE)*F39
40	Y	Owen Williams	A	=VLOOKUP(A40,JC,2,FALSE)	25	25	=VLOOKUP(C40,\$D\$5:\$E\$8,2,FALSE)*F40
41	X	Lotte Charles	A	=VLOOKUP(A41,JC,2,FALSE)	12	12	=VLOOKUP(C41,\$D\$5:\$E\$8,2,FALSE)*F41
42	V	Jeannie Burke	B	=VLOOKUP(A42,JC,2,FALSE)	25	25	=VLOOKUP(C42,\$D\$5:\$E\$8,2,FALSE)*F42
43	W	Jimmy Lee	B	=VLOOKUP(A43,JC,2,FALSE)	12	0	=VLOOKUP(C43,\$D\$5:\$E\$8,2,FALSE)*F43
44	V	Dawid Jones	B	=VLOOKUP(A44,JC,2,FALSE)	25	30	=VLOOKUP(C44,\$D\$5:\$E\$8,2,FALSE)*F44
45	V	Li Sun Wu					=VLOOKUP(C45,\$D\$5:\$E\$8,2,FALSE)*F45
46	V	Charlotte Watson					=VLOOKUP(C46,\$D\$5:\$E\$8,2,FALSE)*F46
47	V	Joe Norfolk					=VLOOKUP(C47,\$D\$5:\$E\$8,2,FALSE)*F47
48	V	Duncan Rydell					=VLOOKUP(C48,\$D\$5:\$E\$8,2,FALSE)*F48
49	V	Ieuan Williams	B	=VLOOKUP(A49,JC,2,FALSE)	25		=VLOOKUP(C49,\$D\$5:\$E\$8,2,FALSE)*F49
50	V	Linda Stuart	B	=VLOOKUP(A50,JC,2,FALSE)	25		=VLOOKUP(C50,\$D\$5:\$E\$8,2,FALSE)*F50
51	V	Joanne Floyd	B	=VLOOKUP(A51,JC,2,FALSE)	25		=VLOOKUP(C51,\$D\$5:\$E\$8,2,FALSE)*F51
52	V	Sam Smith	B	=VLOOKUP(A52,JC,2,FALSE)	20		=VLOOKUP(C52,\$D\$5:\$E\$8,2,FALSE)*F52
53	V	Kate Smith	B	=VLOOKUP(A53,JC,2,FALSE)	25		=VLOOKUP(C53,\$D\$5:\$E\$8,2,FALSE)*F53
54	V	Tony Thomson	B	=VLOOKUP(A54,JC,2,FALSE)	12		=VLOOKUP(C54,\$D\$5:\$E\$8,2,FALSE)*F54
55	X	Dougie Ryder	A	=VLOOKUP(A55,JC,2,FALSE)	25		=VLOOKUP(C55,\$D\$5:\$E\$8,2,FALSE)*F55
56	V	Wally Weston	B	=VLOOKUP(A56,JC,2,FALSE)	25	25	=VLOOKUP(C56,\$D\$5:\$E\$8,2,FALSE)*F56
57	J	Laura Macdonald	C	=VLOOKUP(A57,JC,2,FALSE)	30	30	=VLOOKUP(C57,\$D\$5:\$E\$8,2,FALSE)*F57
58	J	Jenna Hoy	C	=VLOOKUP(A58,JC,2,FALSE)	25	25	=VLOOKUP(C58,\$D\$5:\$E\$8,2,FALSE)*F58
59							
60					Average hours:	=AVERAGE(F18:F58)	
61					Weekly total:		=SUM(G18:G58)

Cell F60 AVERAGE(F18:F58) 1 mark
 Cell G61 SUM(G18:G58) 1 mark

Printout Single landscape page wide, fully visible 1 mark
 Row and Column headings displayed 1 mark
 Replication Both formulae 1 mark

A Candidate, ZZ999, 9999

Tawara Web - weekly pay calculation - week 16						
Job codes			Pay rates			
Job code	Job description	Pay code	Pay rate			
J	Javascript programmer	A	\$15.00			
V	Web developer	B	\$16.00			
W	Web designer	C	\$18.40			
S	SQL programmer	D	\$21.50			
G	Graphic designer					
P	PHP programmer					
M	Magento developer					
F	Front End developer					
X	Junior Web developer					
Y	Junior Front End developer					
Employees						
Job code	Name	Pay code	Job description	Contract hours	Hours worked	Pay
X	Henry Gale	A	Junior Web developer	10	10	\$150.00
X	Kurtis Brown	A	Junior Web developer	25	25	\$375.00
P	Clemantine Leadbetter	C	PHP programmer	25	25	\$460.00
G	Christine Hull	B	Graphic designer	25	15	\$240.00
Y	Karla Greenhalgh	A	Junior Front End developer	12	12	\$180.00
W	Fred Pooley	B	Web designer	25	25	\$400.00
V	Ben Chalmers	B	Web developer	12	12	\$192.00
V	Christopher Lewis	B	Web developer	25	25	\$400.00
W	Rio Patel	B	Web designer	12	12	\$192.00
M	Ruksana Gopaul	D	Magento developer	40	40	\$860.00
X	Angela Akula	A	Junior Web developer	38	38	\$570.00
P	Udoka Onyancha	C	PHP programmer	30	35	\$644.00
Y	Billy Green	A	Junior Front End developer	20	20	\$300.00
V	Wesley Smith	B	Web developer	25	25	\$400.00
V	Wally Weston	B	Web developer	25	28	\$448.00
V	Trevor Jones	B	Web developer	25	25	\$400.00
S	Jasmine Gunn	C	SQL programmer	30	30	\$552.00
Y	Brian Wells	A	Junior Front End developer	25	25	\$375.00
V	Ieuan Williams	B	Web developer	25	10	\$160.00
V	John Vercoe	B	Web developer	25	25	\$400.00
W	Lauren Hall	B	Web designer	25	35	\$560.00
J	Chloe Rhodes	C	Javascript programmer	30	30	\$552.00
Y	Owen Williams	A	Junior Front End developer	25	25	\$375.00
X	Lotte Charles	A	Junior Web developer	12	12	\$180.00
V	Jeannie Burke	B	Web developer	25	25	\$400.00
W	Jimmy Lee	B	Web designer	12	0	\$0.00
V	Dawid Jones	B	Web developer	25	30	\$480.00
V	Li Su	B	Web developer		12	\$192.00
V	Chloe	B	Web developer		25	\$400.00
V	Joe	B	Web developer		25	\$400.00
V	Joan	B	Web developer		30	\$480.00
V	Ant	B	Web developer		0	\$0.00
V	Linda Stuart	B	Web developer	25	25	\$400.00
V	Kate Smith	B	Web developer	25	5	\$80.00
V	Sam Smith	B	Web developer	20	20	\$320.00
V	Duncan Rydell	B	Web developer	25	30	\$480.00
V	Tony Thomson	B	Web developer	25	12	\$192.00
X	Dougie Ryder	A	Junior Web developer		25	\$375.00
Y	David Reid	A	Junior Front End developer		35	\$525.00
J	Laura Macdonald	C	Javascript programmer		30	\$552.00
J	Jenna Hoy	C	Javascript programmer	25	25	\$460.00
					Average hours:	22
					Weekly total:	\$15,101.00

Top row Merge and centre align cells A1 to G1 1 mark
 White 24 point sans-serif font 1 mark
 Dark green background 1 mark

Format Pay column and pay rate column \$ 2dp and 1 mark
 Average hours displayed as integer
 Printout Single portrait page, fully visible, no row and 1 mark
 column headings

A Candidate, ZZ999, 9999

	A	B	C	D	E	F	G
1	Tawara Web - weekly pay calculation - week 16						
2							
16	Employees						
17	Job code	Name	Pay code	Job description	Contract hours	Hours worked	Pay
32	V	Anthony Campbell	B	Web developer	25	0	\$0.00
36	Y	David Reid	A	Junior Front End developer	25	35	\$525.00
44	V	Dawid Jones	B	Web developer	25	30	\$480.00
48	V	Duncan Rydell	B	Web developer	25	30	\$480.00
49	V	Ieuan Williams	B	Web developer	25	10	\$160.00
51	V	Joanne Floyd	B	Web developer	25	30	\$480.00
53	V	Kate Smith	B	Web developer	25	5	\$80.00
56	V	Wally Weston	B	Web developer	25	28	\$448.00

Hidden	Rows 3-15 & 60-61	1 mark
Extract	Job contains developer and contract hours <> hours worked	1 mark
	Sorted ascending on Name	1 mark