1. You have been asked to check stock levels for a product which is in high demand. There are two lists of customers who would like to purchase as many items of this product as possible. Which formula below would work out the correct answer of 6 per customer?

	A	B	C	D	E
1	Stock Levels			Customers	
2	Store A	Store B		List A	List B
3	1,500.00	2,500.00		138	529
4					

○ =(A3+B3)/D3+E3

○ =A3+B3/D3+E3

◉ =(A3+B3)/(D3+E3)

✓ **Correct**
Correct! The Division symbol has a higher priority than the addition so if the brackets did not control the way in which Excel processes the calculation, it's first action would be to divide B3 by D3 and then add on the other numbers. By enclosing the two addition sub-calculations in brackets, they will both be processed before the division.

2. You have decided to award a 10% discount to a valuable customer and in D2 you want to calculate the discount amount that will appear on their monthly invoices. You have typed 10% into A2, and you know that if you multiply the monthly total in C2 by A2, Excel will work out the 10 percent. You also want to be able to use the Autofill feature to copy this formula for the other three months. Which formula below would work out the correct result for you?

	A	B	C	D	E
1	Discount		Monthly Total		
2	10%	January	100		
3		February	200		
4		March	300		
5		April	400		
6					

◉ =C2*A$2

○ =C2*$A2

○ =C2*A2

✓ **Correct**
Correct! One of the features of Autofill is that it would adjust cell references as it copies down row by row. Because the 10% only appears in one cell, you do not want the A2 reference to be changed. The dollar sign will fix part of the cell reference so that it does not adjust automatically when you use the Autofill feature. Remember that the dollar sign fixes what is to the right of where it is typed. In this case, it will fix the row number. if you had been unsure where to position the dollar sign, you could also have used the full absolute reference A2 and that would have worked as well.

3. Functions are a useful and vital part of Excel. Excel contains over a hundred of these predefined formulas which range from the simple and straightforward to the very complex. Which of the following must **every** function formula contain? Select all options that apply.

☐ Commas

☑ The Function name

✓ **Correct**
Correct! The name of the Function must follow the equals sign. It is not necessary to type the Function name in capitals though you will find that when you complete the formula it is displayed in capitals by Excel.

☑ An Equals sign

✓ **Correct**
Correct! Every formula begins with an equals sign. This alerts Excel to the fact that what follows in the cell is a calculation.

☑ A pair of parentheses

✓ **Correct**
Correct! Every Function, regardless of its purpose, will need to have an opening and a closing bracket following it.

4. You have been asked to review the orders placed with suppliers by Peter, one of the members of your team. You want to filter the results sheet so that it only shows the orders that Peter has placed for shoes. When you use the Filter feature, which of the following would get the correct results?

	A	B	C	D	E	F	G
1	SUPPLIER	SOLD BY	ITEM	STOCK NO	PRICE	QTY	TOTAL
2	ABC Athletics	Peter	Dome Tent	409	79.99	1000	$ 79,990.00
3	Your Fitness World	Peter	Exercise Bike	719	695.00	5	$ 3,475.00
4	Sportogo	Sue	Leather Golf Bag	814	212.00	2	$ 424.00
5	ABC Athletics	Peter	Running Shoes	134	14.99	250	$ 3,747.50
6	ABC Athletics	Sue	Walking Shoes	134	14.99	200	$ 2,998.00
7	Your Fitness World	Sue	Sleeping Bag	429	56.00	550	$ 30,800.00
8	ABC Athletics	Sue	Soccer Ball	240	15.55	100	$ 1,555.00
9	Sportogo	Peter	Shoes - general	1125	2.99	300	$ 897.00
10	Sportogo	Sue	Softball	802	279.99	25	$ 6,999.75
11	Sportogo	Peter	Teniwears	512	15.95	50	$ 797.50
12	Your Fitness World	Peter	Teniwears	512	15.99	26	$ 415.74
13	Your Fitness World	Peter	Tennis Shoes	1432	12.00	500	$ 6,000.00

○ Filter on the SOLD BY column and tick the checkbox for Peter. Then Filter on the ITEM column, chose Text Filters and choose "begins with" and type shoes.

○ Filter on the SOLD BY column and tick the checkbox for Peter. Then Filter on the ITEM column and choose the checkbox for shoes.

◉ Filter on the SOLD BY column and tick the checkbox for Peter. Then Filter on the ITEM column choose Text Filters and choose "Contains" and type shoes.
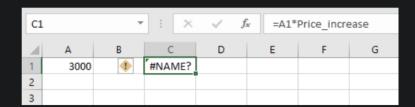
✓ **Correct**
Correct! The entries under ITEM have not been typed in a consistent way and the term shoe appears in different positions. You would need to allow for this in the Filter operation by choosing the Contains filter.

5. You are sent a worksheet by a colleague, and you notice an error message. You need to fix this issue so what is likely to be the cause of this message?

C1		⋮	✕ ✓	*fx*	=A1*Price_increase	

	A	B	C	D	E	F	G
1	3000	⚠	#NAME?				
2							
3							

○ Your colleague has forgotten to enter a value into the cell called Price_increase.

◉ Your colleague has forgotten to assign the name Price_increase to any cell.

○ Your colleague has used an incorrect character in the cell Name. They should have used a space instead of the underscore.

✓ **Correct**
Correct! When Excel generates an error message, the word between the # symbol and the punctuation mark is always an indication of what has caused the error. The #NAME? error will appear in any situation where Excel does not understand a piece of text in a formula. The same error would appear, for example, if you misspelled a Function name in a formula. In this example, it is appearing because the name Price_increase has not been assigned to anything in the workbook, so Excel does not understand it.

6. You have decided to name a cell in your worksheet which contains a key figure that you will be using in lots of different calculations across your whole workbook. You know that spaces are not allowed in Names in Excel. How many of the following statements are also true in relation to Names? Select all options that apply.

☐ Names can mix letters and numbers, but the text characters must come first.

☑ The name cannot be any combination of text and numbers which is also a cell reference.

✓ **Correct**
Correct! Unless the spreadsheets you deal with are very large, it is easy to forget that there are cell references such as tax15 which begin with three letters!
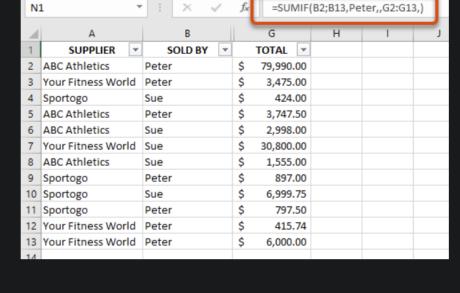
☐ Names are case sensitive.

You didn't select all the correct answers

7. You are still working on the review of orders and sales made by your team, and you would like to find out what Peter's sales are. You are typing this formula into the spreadsheet so that you get a total using only Peter's sales figures. There are several errors in this formula. What are they? Select all options that apply.

N1		⋮	✕ ✓	*fx*	=SUMIF(B2;B13,Peter,,G2:G13,)	

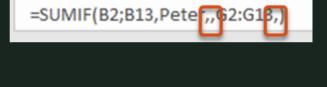|	A	B	G	H	I	J
1	SUPPLIER ▾	SOLD BY ▾	TOTAL ▾			
2	ABC Athletics	Peter	$ 79,990.00			
3	Your Fitness World	Peter	$ 3,475.00			
4	Sportogo	Sue	$ 424.00			
5	ABC Athletics	Peter	$ 3,747.50			
6	ABC Athletics	Sue	$ 2,998.00			
7	Your Fitness World	Sue	$ 30,800.00			
8	ABC Athletics	Sue	$ 1,555.00			
9	Sportogo	Peter	$ 897.00			
10	Sportogo	Sue	$ 6,999.75			
11	Sportogo	Peter	$ 797.50			
12	Your Fitness World	Peter	$ 415.74			
13	Your Fitness World	Peter	$ 6,000.00			
14						

☑ The criterion is wrong.

✓ **Correct**
Correct! While the name Peter is correct, Excel will not understand it as you have not identified it as text. You would do this by surrounding it with inverted commas.

☑ You have specified too many arguments.

✓ **Correct**
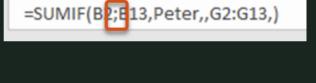Correct! Remember that Excel uses the position of a comma to mark the beginning of a new argument. There are two extra commas in this formula which would cause Excel to return an error.

=SUMIF(B2;B13,Peter,,G2:G13,)

☑ The Criteria range specified has the wrong symbol used.

✓ **Correct**
Correct! The Criteria range, which is the first one listed, has the wrong punctuation symbol used. To specify a range of cells, you must use the colon between the start and end cell reference.

=SUMIF(B2;B13,Peter,,G2:G13,)

☐ The Sum Range is using the wrong column reference.

☐ You have used the wrong Function – it should be SUM.

8. You are teaching a course which requires continuous assessment. You would like to use Excel to track the students' grades. The students are required to achieve a minimum mark of 150 or over to maintain their passing grade. Which formula will be correct in this situation?

	A	B	C	D	E	F	G	H
1	Name	Exam 1	Exam 2	Exam 2	Overall Result		Pass Mark	
2	Grace	56	35	97			150	
3								

○ =IF(SumB2:D2>=G2,Pass,Fail)

○ =IF(Sum(B2:D2)>=G2,"Pass","Fail")

○ =IF(Sum(B2:D2)>=G2,Pass,Fail)

◉ =IF(B2:D2>=G2,Pass,Fail)

✕ **Incorrect**
Not quite. Try going back to review the *Using specialized functions* item in Lesson 4.

9. You are using Excel to keep track of assignments and exams completed by the students in the class you teach. The list of student names in the spreadsheet was downloaded from the school administrative system and the full name is in a single column. If you type the following formula into B2 what would the visible result be?

	A	B
1	Student Name	
2	Grace Lopez	=PROPER(RIGHT(A2,5))
3		

○ GRACE

○ Grace

○ LOPEZ

⦿ Lopez

✓ **Correct**
Correct! The RIGHT function will extract the five characters to the right of the cell entry and the PROPER function will display the first letter of the result as a capital.

10. If they wish, the students in your class can complete extra credit assignments. Only one of the assignments will qualify towards their final grade. If they reach a specific grade in any one of the optional assignments, it will add 50 marks to their overall grade. Will Grace have 50 marks added to her final grade?

	A	B	C	D	E
1		Extra Credit Assignments			
2	Name	One	Two	Three	Extra Credit
3	Grace	56	35	97	=IF(OR(B3>=75,C3>=75,D3>=75),50,0)

○ No, Grace will not be given a bonus 50 marks on her final grade.

⦿ Yes, Grace will be given a bonus 50 marks on her final grade.

✓ **Correct**
Correct. This formula is testing to see if any of the three cells B3, C3, D3 contain a mark of 75 or over. The OR function performs multiple logical tests simultaneously but only one of the tests must be met for the OR to return the value TRUE. If the OR Function returns the word TRUE, the IF function will display the value 50. Because Grace achieved the required minimum grade in the third assignment, the OR function returned the value TRUE, and the IF Function would display the number 50. The OR function would only return the word FALSE if all the logical tests failed. In that case, the IF function would return a 0.

Try going back to review the **Using Logical Functions with conditions** item in Lesson 6.