Subject - Information & Communication Technology

Grade 10

Month - October

Week – 1

Competency 7 – **Uses Spreadsheet to solve simple statistical problems.**

Competency Level 7.6 – **Uses relative versus absolute cell references.**

Student Work

1. Insert the following worksheet into a worksheet in the spreadsheet software.

	A	B	C	D	E	F
1	price of a book	10				
2	quantity	1	2	3	4	5
3	total price					

B1 has a book price of Rs.10. Line 2 shows the different book sizes purchased at that price. Line 3 shows the amount to be paid when obtained under those quantities and prices.

Use your knowledge of formulas to enter the relevant formulas from B3 to F3 separately and get answers.

Eg - Enter = B1 * B2 in B3.

The answers you get as above are correct but the disadvantage is that you have to enter the formulas repeatedly. Observe that.

Accordingly, enter = B1 * B2 in B3 and then continue copying the formula to F3 by dragging along line 3 through the fill format. (Fill format - right corner of cell B3)

	A	B	C	D	E	F
1	price of a book	10				
2	quantity	1	2	3	4	5
3	total price	=B1*B2				

01. Then understand that even if the answers are as follows, they are not correct. The reason for this inaccuracy is that when copying formulas along the same column, the line numbers in the formula change accordingly.

	A	B	C	D	E	F
1	price of a book	10				
2	quantity	1	2	3	4	5
3	total price	=B1*B2	=C1*C2	=D1*D2	=E1*E2	=F1*F2

Let us now consider a tactic to change this situation. The first part of the formula = B1 * B2 is changed to B1, C1, D1, E1 and so on. Understand that this change is wrong. (Price quoted only in B1)

However, note that changing the second part of the formula is not a problem.
(Size included in different cell addresses)
In this case, the cell addresses that change are called relative shell addresses.
In this formula in the price quote column, the column number of the formula is changed. Note that the line did not change because the copying was done along the same line. If so, this problem can be solved by applying the $ symbol before the changing letter or number.
To do this, enter the following formula in B3 and copy as before. Check the answers carefully.
= $ B1 * B2
The following formula is also valid.
= B1 * B2

	A	B	C	D	E	F
1	price of a book	10				
2	quantity	1	2	3	4	5
3	total price	=$B1*B2	=$B1*C2	=$B1*D2	=$B1*E2	=$B1*F2

Here the $ symbol is used to prevent change of cell addresses when copying formulas. Cell copies that do not change when copying formulas or functions are relative shell addresses, and new cell addresses are absolute shell addresses.
Here we considered a case where a line is absolute.

- Read and understand 228, 229, 230, 231 and 232 in your reading book.

- Take and learn lesson-related lessons from the online or printed learning aids listed here.

- If you have a computer, do activities 228, 229, 230, 231 and 232 in the reading book. Learning aids that can help with this lesson.

- Guru gedara - https://www.youtube/GUNOFJ-YrX4
- e-nenapiyasa - https://www.enenapiyasa.lk

Learning Outcomes Available through this Lesson

- **Explains relative and absolute addressing modes.**
- **Uses both modes appropriately in calculations.**