

# FSDA EXCEL ASSIGNMENTS

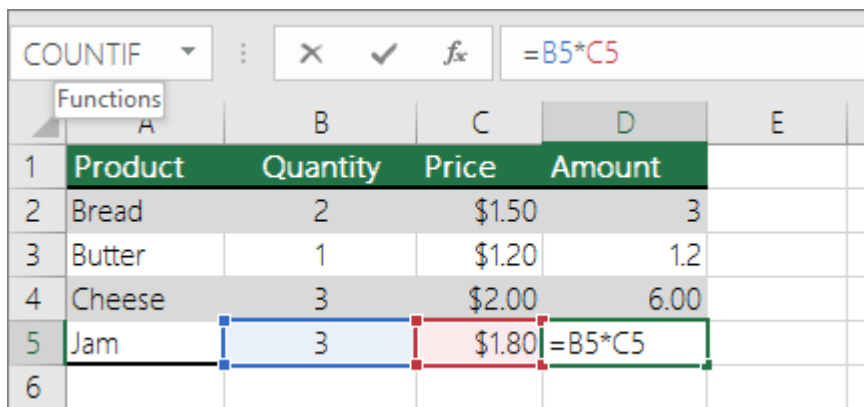
## 1. What does the dollar(\$) sign do?

When a formula contains an absolute reference, no matter which cell the formula occupies the cell reference does not change: if you copy or move the formula, it refers to the same cell as it did in its original location. In an absolute reference, each part of the reference (the letter that refers to the row and the number that refers to the column) is preceded by a “\$” – for example, \$A\$1 is an absolute reference to cell A1. Wherever the formula is copied or moved, it always refers to cell A1.

## 2. How to Change the Reference from Relative to Absolute (or Mixed)?

By default, a cell reference is a relative reference, which means that the reference is relative to the location of the cell. If, for example, you refer to cell A2 from cell C2, you are actually referring to a cell that is two columns to the left (C minus A)—in the same row (2). When you copy a formula that contains a relative cell reference, that reference in the formula will change.


As an example, if you copy the formula `=B4*C4` from cell D4 to D5, the formula in D5 adjusts to the right by one column and becomes `=B5*C5`. If you want to maintain the original cell reference in this example when you copy it, you make the cell reference absolute by preceding the columns (B and C) and row (2) with a dollar sign (\$). Then, when you copy the formula `=B$4*$C$4` from D4 to D5, the formula stays exactly the same.



|   | A       | B        | C      | D      | E |
|---|---------|----------|--------|--------|---|
| 1 | Product | Quantity | Price  | Amount |   |
| 2 | Bread   | 2        | \$1.50 | 3      |   |
| 3 | Butter  | 1        | \$1.20 | 1.2    |   |
| 4 | Cheese  | 3        | \$2.00 | 6.00   |   |
| 5 | Jam     | 3        | \$1.80 | =B5*C5 |   |
| 6 |         |          |        |        |   |

Less often, you may want to mixed absolute and relative cell references by preceding either the column or the row value with a dollar sign—which fixes either the column or the row (for example, \$B4 or C\$4).

To change the type of cell reference:

1. Select the cell that contains the formula.
2. In the formula bar  , select the reference that you want to change.
3. Press F4 to switch between the reference types.

The table below summarizes how a reference type updates if a formula containing the reference is copied two cells down and two cells to the right.

### 3. Explain the order of operations in excel?

If you combine several operators in a single formula, Excel performs the operations in the order shown in the following table. If a formula contains operators with the same precedence—for example, if a formula contains both a multiplication and division operator—Excel evaluates the operators from left to right.

| Operator       | Description                                  |
|----------------|--|
| : (colon)      | Reference operators                          |
| (single space) |  |
| , (comma)      |  |
| –              | Negation (as in –1)                          |
| %              | Percent                                      |
| ^              | Exponentiation                               |
| * and /        | Multiplication and division                  |
| + and –        | Addition and subtraction                     |
| &              | Connects two strings of text (concatenation) |
| =              | Comparison                                   |
| < >            |  |
| <=             |  |
| >=             |  |
| <>             |  |

#### **4. What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?**

- Sum, Sumif, Sumifs
- Text Functions
- Vlookup: =Vlookup(lookup\_value,lookup\_array,col\_index\_num,range\_lookup)
- Average
- Concatenate: Concatenate(text1,text2,...textn)

#### **5. When would you use the subtotal function?**

- The SUBTOTAL function is designed for columns of data, or vertical ranges. It is not designed for rows of data, or horizontal ranges. For example, when you subtotal a horizontal range using a function\_num of 101 or greater, such as SUBTOTAL(109,B2:G2), hiding a column does not affect the subtotal. But, hiding a row in a subtotal of a vertical range does affect the subtotal.
- If any of the references are 3-D references, SUBTOTAL returns the #VALUE! error value.

#### **6. What is the syntax of the vlookup function? Explain the terms in it?**

**Syntax:** Vlookup: =Vlookup(lookup\_value,lookup\_array,col\_index\_num,range\_lookup)

=VLOOKUP(What you want to look up, where you want to look for it, the column number in the range containing the value to return, return an Approximate or Exact match – indicated as 1/TRUE, or 0/FALSE).