

****1. Creating a Formula for Multiple Cells in Excel:****

To create a formula for multiple cells in Excel, you can use the “Fill Handle” or “AutoFill” feature to copy the formula to a range of cells. Here’s how:

1. Enter your formula in the first cell where you want to apply it. For example, type `=A1*B1` in cell C1.
2. Press Enter to calculate the result.
3. Click on the cell (C1) with the formula.
4. Move your cursor to the small square at the lower-right corner of the selected cell (the Fill Handle). It will turn into a black cross.
5. Click and drag the Fill Handle down to fill the formula into the desired range of cells. Excel will automatically adjust the cell references in the formula as you drag it down. For example, if you drag it down to C2, it will become `=A2*B2`.
6. Release the mouse button to copy the formula into the selected cells.

The formula will be applied to all the cells you dragged it over, with the cell references adjusted accordingly.

****2. Copying Formulas Down a Column Without Changing References:****

To copy a formula down a column without changing the cell references, you can use what’s known as “Absolute Cell References.” Absolute references are denoted by a dollar sign (\$) before the column letter and row number. Here’s how to do it:

1. Enter your formula with absolute references in the first cell where you want to apply it. For example, type `= A1*B1` in cell C1. The dollar signs before the column letter and row number make the reference absolute.
2. Press Enter to calculate the result.
3. Click on the cell (C1) with the formula.
4. Move your cursor to the small square at the lower-right corner of the selected cell (the Fill Handle).
5. Click and drag the Fill Handle down to fill the formula into the desired range of cells.

With absolute references in place, the reference to cell A1 (`A1`) will remain fixed, while the reference to cell B1 will adjust as you copy the formula down. For example, in cell C2, the formula will still be `= A1*B2`. This allows you to copy the formula without changing the reference to cell A1.