

Spreadsheet Sequences 2

The aim of this lesson is to use a spreadsheet to create and continue sequences of numbers.

Task A 3 Times Table Using the Fill Handle

- 1) Look at the spreadsheet on the right. Numbers have been entered into 4 cells. Copy these numbers into your own spreadsheet.

| | A | B | C | D |
|---|---|---|---|---|
| 1 | 1 | 3 | | |
| 2 | 2 | 6 | | |
| 3 | | | | |

- 2) Select the 4 cells as shown. A 'fill handle' should appear in the lower-right corner of cell B2. This is the small black square.

| | A | B | C | D |
|---|---|---|---|---|
| 1 | 1 | 3 | | |
| 2 | 2 | 6 | | |
| 3 | | | | |

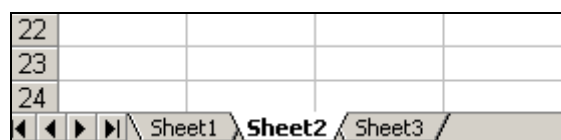
- 3) Click on the fill handle and hold the mouse button down. Drag the fill handle to cell B10, then release. You should have created the 3 times table.

| | A | B | C | D |
|----|----|----|---|---|
| 1 | 1 | 3 | | |
| 2 | 2 | 6 | | |
| 3 | 3 | 9 | | |
| 4 | 4 | 12 | | |
| 5 | 5 | 15 | | |
| 6 | 6 | 18 | | |
| 7 | 7 | 21 | | |
| 8 | 8 | 24 | | |
| 9 | 9 | 27 | | |
| 10 | 10 | 30 | | |
| 11 | | | | |

- 4) Save your spreadsheet.

Task B Example – Adding the Other Parts of the Times Table

- 1) Click on the 'Sheet 2' tab at the bottom of the screen. This gives you a new, blank worksheet to work with.



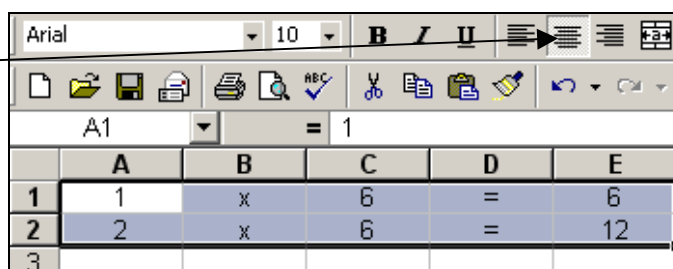
- 2) We will now create the 6 times table as you are used to seeing them. The extra cells are just for show. They do not actually do any calculating.

| | A | B | C | D | E |
|---|---|---|---|---|----|
| 1 | 1 | x | 6 | = | 6 |
| 2 | 2 | x | 6 | = | 12 |
| 3 | | | | | |

Use an **x** for the multiplication signs in cells B1 and B2.

Entering an equals sign in a cell may confuse the spreadsheet. Use the text '= ' in cells D1 and D2.

- 3) Select all cells that include data (range A1:E2). Click on the 'Align Center' icon in the toolbar.



Spreadsheet Sequences 2 (cont)

- 4) Use the 'Fill Down' tool to complete the times table up to 12 x 6.

Save your spreadsheet.

| | A | B | C | D | E |
|----|----|---|---|---|----|
| 1 | 1 | x | 6 | = | 6 |
| 2 | 2 | x | 6 | = | 12 |
| 3 | 3 | x | 6 | = | 18 |
| 4 | 4 | x | 6 | = | 24 |
| 5 | 5 | x | 6 | = | 30 |
| 6 | 6 | x | 6 | = | 36 |
| 7 | 7 | x | 6 | = | 42 |
| 8 | 8 | x | 6 | = | 48 |
| 9 | 9 | x | 6 | = | 54 |
| 10 | 10 | x | 6 | = | 60 |
| 11 | 11 | x | 6 | = | 66 |
| 12 | 12 | x | 6 | = | 72 |
| 13 | | | | | |

Task C Adding Worksheets

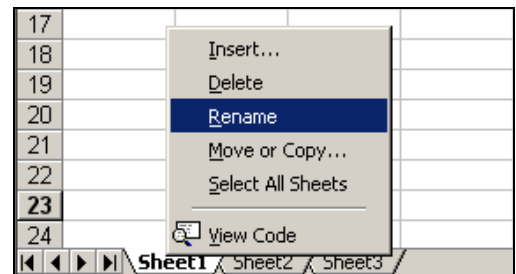
We will look at how to create and rename worksheets, so that a new one can be used for each task below.

- 1) Place your mouse pointer over the 'Sheet 1' tab and click on the **right** mouse button.

Select 'Rename' from the list and left-click.

Change the name to **3x**.

In the same way, change the name of Sheet 2 to **6x**.



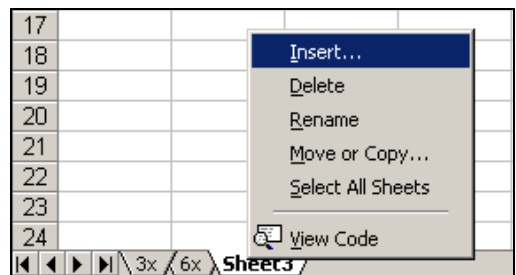
- 2) Right-click on the 'Sheet 3' tab and select 'Insert'.

Select 'Worksheet' from the list and click 'OK'.

Rename the new worksheet **4x**.

Use this worksheet in the first task below.

Use the same method to create and name a new worksheet for each question.



Task D Further Tasks

- 1) Use the method above to create the following times table worksheets.
- | | | |
|-----------------------|------------------------|------------------------|
| a) The 4 times table | b) The 7 times table | c) The 12 times table |
| d) The 39 times table | e) The 0.5 times table | f) The 999 times table |
- 2) Create worksheets that continue the following sequences up to at least 20 terms. You only need two columns. The first should have the term (1, 2, 3 etc). The second should contain the sequence of numbers. As these problems all use fixed gaps between numbers, the spreadsheet should only need you to enter the first 2 terms before it will recognise the pattern.
- | | | |
|---------------------------|------------------------|---------------------------|
| a) 2, 5, 8, 11.... | b) 15, 21, 27, 33.... | c) 101, 202, 303, 404.... |
| d) 0.1, 0.2, 0.3, 0.4.... | e) 100, 98, 96, 94.... | f) 50, 41, 32, 23 ... |