How find out how many numbers in a Minitab column are in a given range.

Coding and tabulating

Suppose, for definiteness, that the column containing the sample of differences is C3. Your first task is to produce a new column (C4 say) in which there are only three arbitrary values (1, 2 and 3 will do fine): the column has a 1 if the value in the corresponding row of C3 is below −53.3, a value 2 if the value in C3 is between −53.3 and 53.3, and finally the value in C4 is 3 if the corresponding value in C3 is greater than 53.3.

> How to do this*: choose* **Code** *from the* **Data** *menu and select the* **Numeric to Numeric.***. option. Enter C3 (or whichever column contains the sample) in the* **Code data from columns:** *box and C4 (or another column for the labels) in the* **Into columns:** *box. In the first (long) box under* **Original values (eg , 1:4 12):** *you need to enter the values in C3 which will be coded as '1' in C4. This is not a single value but a range of values, namely all values below −53.3. You enter this as a range, starting from a very low value which will be smaller than the smallest value in C3, so e.g., you should type −1000:-53.3 in this box. The ':' is used by Minitab to indicate the range of all values from −1000 to −53.3. If you now click on the corresponding box under* **New:** *and type 1, then this has told Minitab to create, in C4, a column which has value 1 whenever the corresponding row of C3 contains a number between −1000 and −53.3. You now need to tell Minitab what to do when it encounters values in C3 that are greater than −53.3.*
> *The first thing is to go to the box in the next row below* **Original values (eg , 1:4 12):** *and type −53.3:53.3 and then to type 2 in the corresponding box below* **New:***. Finally go to the next row and type 53.3:1000 and 3, respectively, in the two boxes. Now click on* **OK***.*

Having produced the column with the original data recoded into the three categories, 1,2 and 3, your next task is to use Minitab to count how many 1s, how many 2s and how many 3s there are in C4.

How to do this*: From the* **Stat** *menu, choose* **Tables** *and then* **Tally Individual Variables...** *Select C4 (or the newly formed column if not C4) to be in the* **Variables:** *box. Make sure that the* **Counts** *item is checked under* **Display***. Now click on* **OK***.* The display will show the number of 1s, 2s and 3s in C4.

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