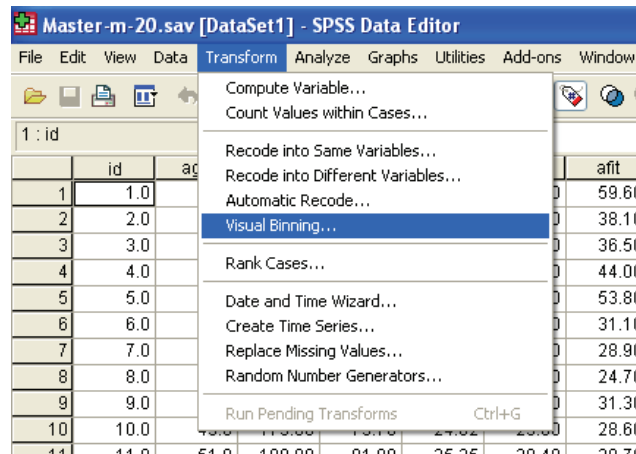
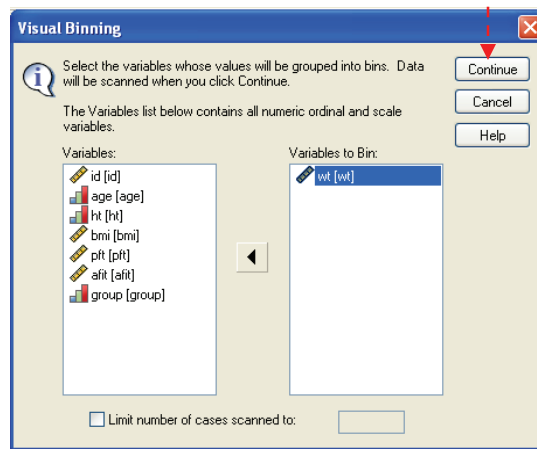


SPSS: Grouped Frequency Distribution

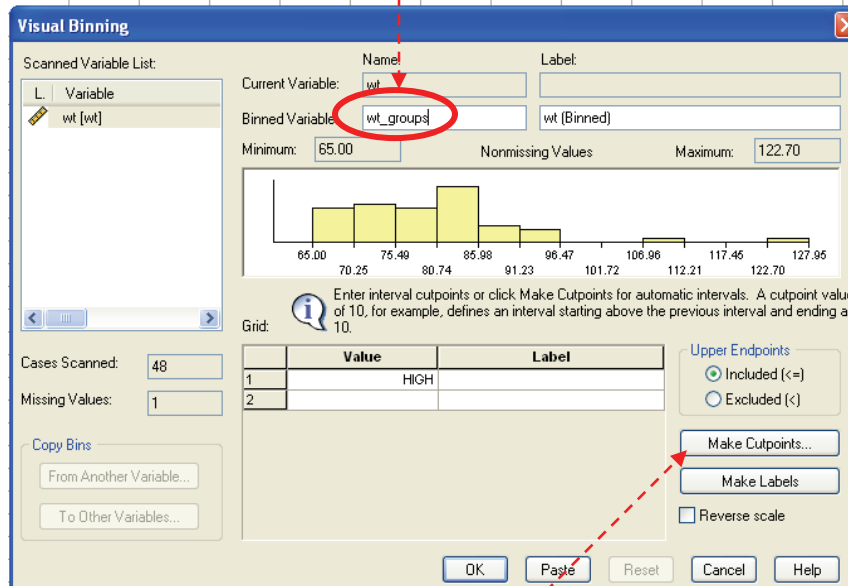
- **FIRST STEP:** Under the Transform menu, choose Visual Binning... This command assists you in creating a new variable that groups the data. You will then use the new variable to create a grouped frequency distribution.



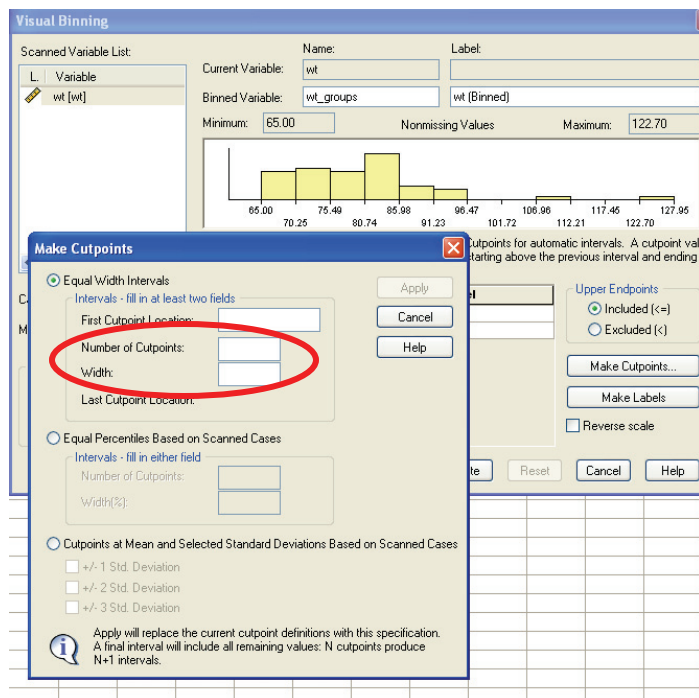
- From the Variables list box, click on wt (weight) and then on the arrow to move it to the Variable to Band list box. Click Continue.



- Select wt in the left box. Near the top of this dialog box, enter a name for your new variable (such as **wt_groups**) in the “Binned Variable” box (cannot have any spaces in the name).



- Near the lower right, click Make Cutpoints...
- We are going to make Equal Width Intervals, which is the default selection in this dialog box. You have to fill in 2 of the 3 fields; for our purposes, fill in “Number of Cutpoints” and “Width”.

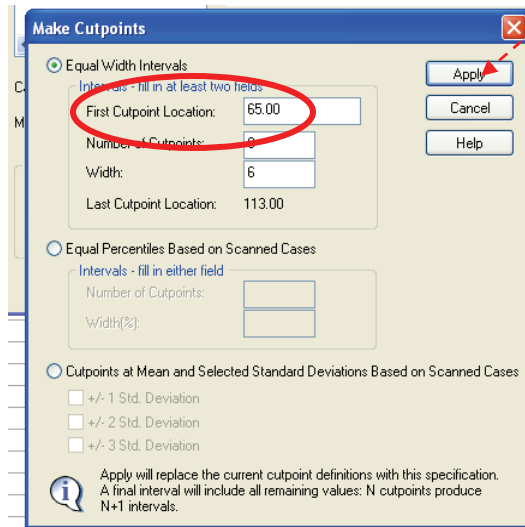


- As discussed above, generally 10 to 15 intervals works well. The Number of Cutpoints = [number of intervals – 1]. (Why?*) Thus, if we want 10 intervals, we'll enter 9 in the "Number of Cutpoints" box.
- For the "Width" of each interval: (a) find the difference between the lowest and highest score in your data (you can see these values in the background dialog box behind the active dialog box); (b) divide the difference by the number of intervals (in this example, $[122.7 - 65] / 10 = 5.77$); and (c) round up to the whole number (6.0). Enter that number as the interval Width.

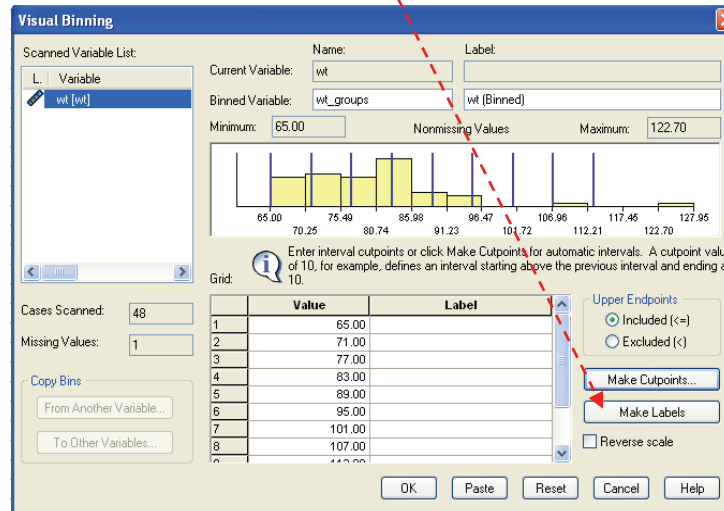
The image shows two overlapping dialog boxes from SPSS. The background dialog is 'Visual Binning', which is used for creating bins for a variable. It shows the 'Current Variable' as 'wt' and the 'Binned Variable' as 'wt_groups'. A histogram is displayed with a minimum value of 65.00 and a maximum value of 122.70. The foreground dialog is 'Make Cutpoints', which is used to specify the number of intervals and the width of each interval. The 'Equal Width Intervals' option is selected, and the 'Number of Cutpoints' is set to 9 and the 'Width' is set to 6. Red dashed arrows indicate the relationship between the text in the list above and the values in the dialog boxes.

*Because one cutpoint makes 2 categories. For example, if you have one apple and you "cut" it in half (one cutpoint), you have 2 apple halves. If you cut one of those halves (so now you have a total of two cuts to the apple), you'll have 3 pieces of apple. Make another cut (3 total cuts to the apple) and you'll have 4 pieces of apple, and so on. So, you will always have one more category than you have cutpoints.

- Click in the First Cutpoint Location box, which should fill in automatically. In this example, the value 65.00 automatically appears. Click Apply to return to the main Visual Binning dialog box.

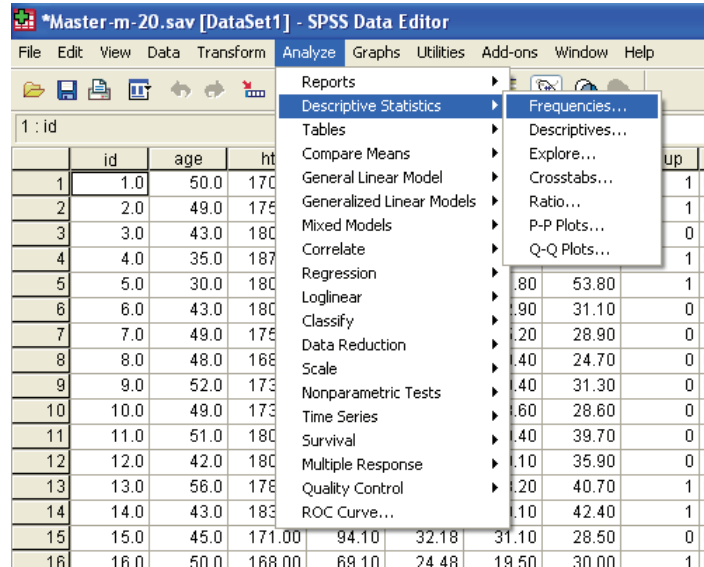


- On the lower right, click Make Labels. This labels the variable so that when you create a frequency table, the intervals are labeled with the ranges of data they contain.

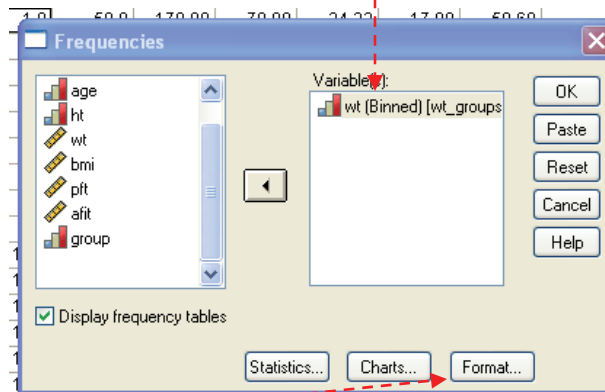


- Click OK, and click OK in the next dialog box to create the new variable. You will see that new variable as the last column in the Data Editor window.

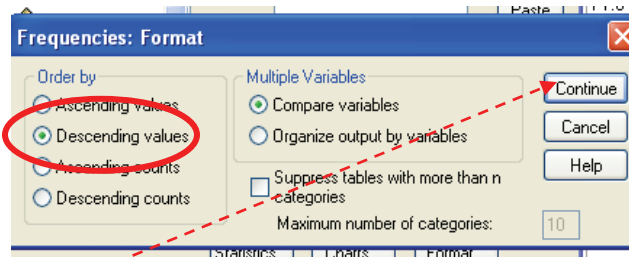
- **SECOND STEP:** Under the Analyze menu, select Descriptive Statistics>Frequencies...



- Select the variable you just created (wt_grps) and move it to the Variable(s) box.



- Click Format... and choose Descending values in the Order by column.



- Click Continue. Click OK in the main dialog box.
- An output file opens showing your grouped frequency distribution.