

RECODE

When you want to transform an existing variable into a new one, you can use this versatile command. In this example, the number of math courses varied from 1 to 12, although many values in between did not occur in the sample. It appeared from the frequency distribution that three categories would best represent the meaningful variation: fewer than 4 math courses, 4 math courses, or more than 4 math courses. This is how the variable (math) can be recoded into a new one (named math3 to indicate that there are three categories):

```
recode math (lo thru 3 = 1) (4 = 2) (5 thru hi = 3) into math3 .
```

Note that you can use "lo" to indicate the lowest value without even specifying exactly what it is ("hi" works in the same way for the highest value). The word "thru" is used to indicate a range of values. You can also list values to combine, separated by commas. For example, the following command would have produced identical results to the one used above:

```
recode math (1,2,3 = 1) (4 = 2) (5,6,7,8,9,10,11,12 = 3) into math3 .
```

Any time you create a new variable (here, math3), you should label it:

```
variable labels  
  math3 'Number of math courses (grouped)' .
```

Because the variable is categorical, you should also label the values:

```
value labels  
  math3 1 '<4' 2 '4' 3 '>4' .
```

Finally, you should check to see that the recoding has been done as you expected. To do this, look at the original variable and the new one. In this case, you can see that the values for <4, 4, or >4 math courses have been correctly collapsed into three categories.

```
freq vars = math math3 .
```

Frequencies

Statistics

		Number of math courses	Number of math courses (grouped)
N	Valid	105	105
	Missing	1	1

Frequency Table

Number of math courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	3	2.8	2.9	2.9
	3	15	14.2	14.3	17.1
	4	56	52.8	53.3	70.5
	5	28	26.4	26.7	97.1
	6	2	1.9	1.9	99.0
	12	1	.9	1.0	100.0
	Total	105	99.1	100.0	
Missing	System	1	.9		
Total		106	100.0		

Number of math courses (grouped)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<4	18	17.0	17.1	17.1
	4	56	52.8	53.3	70.5
	>4	31	29.2	29.5	100.0
	Total	105	99.1	100.0	
Missing	System	1	.9		
Total		106	100.0		