

Setting the Percentage in PROC TABULATE

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Introduction

Basic Syntax

```
PROC TABULATE DATA=dataset;  
    CLASS categorical_variables;  
    VAR numeric_variables;  
    TABLE page_dimension,  
            row_dimension,  
            column_dimension  
    RUN;
```


Example, No Percentages

```
PROC TABULATE DATA=sashelp.cars
  formchar=" |----|+|---"
  f=6.;
  CLASS make type;
  TABLE make,type;
  WHERE origin='USA' AND
    type IN('SUV','Sedan');
RUN;
```

	Type	
	SUV	Sedan
	N	N
Make		
Buick	2	7
Cadillac	2	4
Chevrolet	4	15
Chrysler	.	13
Dodge	1	8
Ford	4	11
GMC	3	1
Hummer	1	.
Jeep	3	.
Lincoln	2	7
Mercury	1	7
Oldsmobile	.	3
Pontiac	1	8
Saturn	1	6

The 'Automatics'

- REPPCTN and REPPCTSUM statistics--print the percentage of the value in a single table cell in relation to the total of the values in the report.
- COLPCTN and COLPCTSUM statistics--print the percentage of the value in a single table cell in relation to the total of the values in the column.
- ROWPCTN and ROWPCTSUM statistics--print the percentage of the value in a single table cell in relation to the total of the values in the row.
- PAGEPCTN and PAGEPCTSUM statistics--print the percentage of the value in a single table cell in relation to the total of the values in the page.

Using ROWPCTN

```
PROC TABULATE DATA=sashelp.cars
  formchar="|----|+|---" F=6.;
  CLASS make type;
  TABLE make,
    (type*(n ROWPCTN='%'*F=6.1))
    ALL;
  WHERE origin='USA' AND
    type IN('SUV','Sedan');
RUN;
```

	Type				All
	SUV		Sedan		
	N	%	N	%	
Make					
Buick	2	22.2	7	77.8	9
Cadillac	2	33.3	4	66.7	6
Chevrolet	4	21.1	15	78.9	19
Chrysler	.	.	13	100.0	13
Dodge	1	11.1	8	88.9	9
Ford	4	26.7	11	73.3	15
GMC	3	75.0	1	25.0	4
Hummer	1	100.0	.	.	1
Jeep	3	100.0	.	.	3
Lincoln	2	22.2	7	77.8	9
Mercury	1	12.5	7	87.5	8
Oldsmobile	.	.	3	100.0	3
Pontiac	1	11.1	8	88.9	9
Saturn	1	14.3	6	85.7	7

Using COLPCTN

```
options ls=64 center;

data _class;
  set sashelp.class;
  agegrp=age;
  label agegrp='Age Group';
run;

proc tabulate data=_class
  formchar="|----|+|----" F=6.;
  class sex agegrp;
  var age;
  tables (age*(n mean*f=6.1 min max))
         agegrp*(n colpctn='%'*f=6.1)
         ,sex /rts=30;
run;
```

		Sex	
		F	M
Age	N	9	10
	Mean	13.2	13.4
	Min	11	11
	Max	15	16
Age Group			
11	N	1	1
	%	11.1	10.0
12	N	2	3
	%	22.2	30.0
13	N	2	1
	%	22.2	10.0
14	N	2	2
	%	22.2	20.0
15	N	2	2
	%	22.2	20.0
16	N	.	1
	%	.	10.0

Percentage with Missing

```
data _class;
  length subnum sex 8;
  infile cards;
  input subnum trt sex age @@;
  sexk=n(sex);
  label trt='Treatment' sex='Gender' age='Age';
cards;
1 2 1 25 2 1 2 28 3 1 1 46 4 2 1 24 5 1 1 63
6 2 1 47 7 1 2 56 8 2 1 23 9 2 1 43 10 1 . 55
11 2 1 53 12 2 1 25 13 2 1 50 14 2 2 44 15 2 1 48
16 2 1 64 17 2 1 59 18 1 1 59 19 1 2 47 20 2 1 65
;
run;
proc format;
  value trtf 1='Arm A' 2='Arm B';
  value sexf .='Missing' 1='Male' 2='Female';
run;
proc tabulate data=_class missing
  formchar="|----|+|---" F=6.;
  class trt sex;
  var age sexk;
  tables age*(n mean*f=6.1 min max)
         sex*sexk='Group'*(n colpctsum='%'*f=6.1)
         ,trt all/rts=30;
  format sex sexf. trt trtf.;
run;
```

			Treatment		All
			Arm A	Arm B	
Age	N		7	13	20
	Mean		50.6	43.8	46.2
	Min		28	23	23
	Max		63	65	65
Gender					
Missing	Group	N	1	.	1
		%	0.0	.	0.0
Male	Group	N	3	12	15
		%	50.0	92.3	78.9
Female	Group	N	3	1	4
		%	50.0	7.7	21.1

Setting Your Own Denominator

- PCTN<var> -- Frequency counts, VAR being the variable to use as the denominator
- PCTSUM<var> -- Sums of data, VAR being the variable to use as the denominator

Specifying the Denominator

```
PROC TABULATE DATA=sashelp.cars
  formchar="|----|+|---" f=6.;
  CLASS make type;
  TABLE make,
    (type*(n
      PCTN<make>='%'*F=6.1))
    ALL;
  WHERE origin='USA' AND
    type IN('SUV','Sedan');
RUN;
```

	Type				All
	SUV		Sedan		
	N	%	N	%	
Make					
Buick	2	8.0	7	7.8	9
Cadillac	2	8.0	4	4.4	6
Chevrolet	4	16.0	15	16.7	19
Chrysler	.	.	13	14.4	13
Dodge	1	4.0	8	8.9	9
Ford	4	16.0	11	12.2	15
GMC	3	12.0	1	1.1	4
Hummer	1	4.0	.	.	1
Jeep	3	12.0	.	.	3
Lincoln	2	8.0	7	7.8	9
Mercury	1	4.0	7	7.8	8
Oldsmobile	.	.	3	3.3	3
Pontiac	1	4.0	8	8.9	9
Saturn	1	4.0	6	6.7	7

Conclusion, Questions and Contact Information

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