

```
1 ods pdf file = '/home/u61979420/section8.pdf';
2 /* 1a) (a) Use PROC FREQ to create a report using the Sanfran data set that displays the
3 frequency count for each Destination, and a separate frequency count for each
4 DepartDay. Add an appropriate title to each frequency table. */
5
6 data Sanfran;
7 set '/home/u61979420/sanfran.sas7bdat';
8 run;
9
10 proc freq data = Sanfran;
11 title 'Destinations from San Fran';
12 tables destination;
13 run;
14
15 proc freq data = Sanfran;
16 title 'Depart Day from Sanfran';
17 tables departday;
18 run;
19
20 /* 1b) You can specify many options in the TABLES statement to control the calculations
21 and appearance of a frequency table. The NOCUM option suppresses the printing of the
22 cumulative frequencies and cumulative percentages. Modify the program from (a) to
23 repeat the frequency tables, but without the cumulative frequencies. */
24
25 proc freq data = Sanfran;
26 title 'Destinations from San Fran';
27 tables destination / NOCUM;
28 run;
29
30 proc freq data = Sanfran;
31 title 'Depart Day from Sanfran';
32 tables departday / NOCUM;
33 run;
34
```

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35 /* 1c) Use PROC FREQ to create a two-way frequency table using the Sanfran data set
36 that displays the frequency count for each Destination by DepartDay combination. */
37 proc freq data = Sanfran;
38 title 'Destination x Depart Day From San Fran';
39 tables destination * departday;
40 run;
41
42 /* 2a) Generate a PROC MEANS report using the Sanfran data set as input to display
43 statistics for the variables CargoRev and TotPassCap only. Remove any titles
44 currently in effect. */
45
46 proc means data = Sanfran;
47 var cargorev totpasscap;
48 title;
49 run;
50
51 /* 2b) Modify the previous report to display the data for each Destination (note: you
52 do NOT need to sort the Sanfran dataset to do this). Include the following statistics:
53 number of observations, mean, median, mode, range and standard deviation. Limit all
54 output to two decimal places. */
55 proc means data = Sanfran n mean median mode range stddev maxdec=2;
56 var cargorev totpasscap;
57 class destination;
58 title;
59 run;
60 ods pdf close;

```

The FREQ Procedure

Destination	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ANC	10	19.23	10	19.23
HND	8	15.38	18	34.62
HNL	3	5.77	21	40.38
RDU	6	11.54	27	51.92
SEA	25	48.08	52	100.00

The FREQ Procedure

DepartDay	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	6	11.54	6	11.54
2	13	25.00	19	36.54
3	5	9.62	24	46.15
4	7	13.46	31	59.62
5	7	13.46	38	73.08
6	8	15.38	46	88.46
7	6	11.54	52	100.00

The FREQ Procedure

Destination	Frequency	Percent
ANC	10	19.23
HND	8	15.38
HNL	3	5.77
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SEA	25	48.08

The FREQ Procedure

DepartDay	Frequency	Percent
1	6	11.54
2	13	25.00
3	5	9.62
4	7	13.46
5	7	13.46
6	8	15.38
7	6	11.54

The FREQ Procedure

Frequency
Percent
Row Pct
Col Pct

Table of Destination by DepartDay								
Destination	DepartDay							Total
	1	2	3	4	5	6	7	
ANC	0	3	1	1	3	2	0	10
	0.00	5.77	1.92	1.92	5.77	3.85	0.00	19.23
	0.00	30.00	10.00	10.00	30.00	20.00	0.00	
	0.00	23.08	20.00	14.29	42.86	25.00	0.00	
HND	1	2	1	3	1	0	0	8
	1.92	3.85	1.92	5.77	1.92	0.00	0.00	15.38
	12.50	25.00	12.50	37.50	12.50	0.00	0.00	
	16.67	15.38	20.00	42.86	14.29	0.00	0.00	
HNL	0	0	0	0	1	2	0	3
	0.00	0.00	0.00	0.00	1.92	3.85	0.00	5.77
	0.00	0.00	0.00	0.00	33.33	66.67	0.00	
	0.00	0.00	0.00	0.00	14.29	25.00	0.00	
RDU	2	1	1	0	1	0	1	6
	3.85	1.92	1.92	0.00	1.92	0.00	1.92	11.54
	33.33	16.67	16.67	0.00	16.67	0.00	16.67	
	33.33	7.69	20.00	0.00	14.29	0.00	16.67	
SEA	3	7	2	3	1	4	5	25
	5.77	13.46	3.85	5.77	1.92	7.69	9.62	48.08
	12.00	28.00	8.00	12.00	4.00	16.00	20.00	
	50.00	53.85	40.00	42.86	14.29	50.00	83.33	
Total	6	13	5	7	7	8	6	52
	11.54	25.00	9.62	13.46	13.46	15.38	11.54	100.00

The MEANS Procedure

Variable	N	Mean	Std Dev	Minimum	Maximum
CargoRev	52	33433.50	23731.72	9417.00	84495.00
TotPassCap	52	203.8076923	52.4494298	150.0000000	267.0000000

The MEANS Procedure

Destination	N Obs	Variable	N	Mean	Median	Mode	Range	Std Dev
ANC	10	CargoRev	10	35811.30	34443.00	31992.00	12651.00	4458.74
		TotPassCap	10	257.60	261.00	267.00	29.00	11.69
HND	8	CargoRev	8	78625.50	78432.00	.	11352.00	3251.06
		TotPassCap	8	250.50	255.00	255.00	18.00	8.33
HNL	3	CargoRev	3	59684.00	61146.00	.	6450.00	3464.64
		TotPassCap	3	207.00	207.00	207.00	0.00	0.00
RDU	6	CargoRev	6	37840.00	38184.00	.	11610.00	4787.04
		TotPassCap	6	267.00	267.00	267.00	0.00	0.00
SEA	25	CargoRev	25	13813.32	13803.00	11997.00	8514.00	2316.59
		TotPassCap	25	151.80	150.00	150.00	15.00	4.97