

The test12 data

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The data:

```
2 9
16 40
8 17
18 43
10 25
4 10
10 27
12 30
```

The SAS code and output:

```
options linesize=70;

data test;
    infile "test12.dat";
    input score1 score2;

proc gplot;
    plot score1*score2;

proc princomp out=fred;

proc print;
```

```
The PRINCOMP Procedure
Observations      8
Variables          2
```

	Simple Statistics	
	score1	score2
Mean	10.00000000	25.12500000
Std	5.45108115	12.66533514

Correlation Matrix		
	score1	score2
score1	1.0000	0.9891
score2	0.9891	1.0000

Eigenvalues of the Correlation Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	1.98907796	1.97815591	0.9945	0.9945
2	0.01092204		0.0055	1.0000

Eigenvectors		
	Prin1	Prin2
score1	0.707107	0.707107
score2	0.707107	-.707107

Obs	score1	score2	Prin1	Prin2
1	2	9	-1.93801	-0.13749
2	16	40	1.60878	-0.05216
3	8	17	-0.71306	0.19418
4	18	43	2.03571	0.03979
5	10	25	-0.00698	0.00698
6	4	10	-1.62274	0.06612
7	10	27	0.10468	-0.10468
8	12	30	0.53161	-0.01273

