

### Analysis of Cavendish's density data... via SAS

```
Proc means data=sasuser.density;
run;
```

Analysis Variable : DENSITY

N	Mean	Std Dev	Minimum	Maximum
29	5.4196552	0.3388793	4.0700000	5.8600000

```
Proc univariate data=sasuser.density;
run;
```

Univariate Procedure

Variable=DENSITY

#### Moments

N	29	Sum Wgts	29
Mean	5.419655	Sum	157.17
Std Dev	0.338879	Variance	0.114839
Skewness	-2.32906	Kurtosis	8.487985
USS	855.0227	CSS	3.215497
CV	6.252783	Std Mean	0.062928
T:Mean=0	86.12429	Pr> T	0.0001
Num ^= 0	29	Num > 0	29
M(Sign)	14.5	Pr>= M	0.0001
Sgn Rank	217.5	Pr>= S	0.0001

#### Quantiles(Def=5)

100% Max	5.86	99%	5.86
75% Q3	5.61	95%	5.85
50% Med	5.46	90%	5.79
25% Q1	5.3	10%	5.1
0% Min	4.07	5%	4.88
		1%	4.07
Range	1.79		
Q3-Q1	0.31		
Mode	5.29		

#### Extremes

Lowest	Obs	Highest	Obs
4.07(	10)	5.65(	28)
4.88(	7)	5.75(	21)
5.1(	23)	5.79(	20)
5.26(	13)	5.85(	27)
5.27(	26)	5.86(	24)

```
Proc reg data=sasuser.density;
model density = ; run;
```

Dependent Variable: DENSITY

#### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	0	0.00000	.	.	.
Error	28	3.21550	0.11484		
C Total	28	3.21550			

Root MSE	0.33888	R-square	0.0000
Dep Mean	5.41966	Adj R-sq	0.0000
C.V.	6.25278		

#### Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	T for H0: Parameter=0	Prob >  T
INTERCEP	1	5.42	.063	86.1	0.0001

----- how data were read in and dataset set up -----

```
data sasuser.density;
input density;
lines;
5.50
5.57
5.42
5.61
5.53
5.47
4.88
5.62
5.63
4.07
5.29
5.34
5.26
5.44
5.46
5.55
5.34
5.30
5.36
5.79
5.75
5.29
5.10
5.86
5.58
5.27
5.85
5.65
5.39
;
run;
```