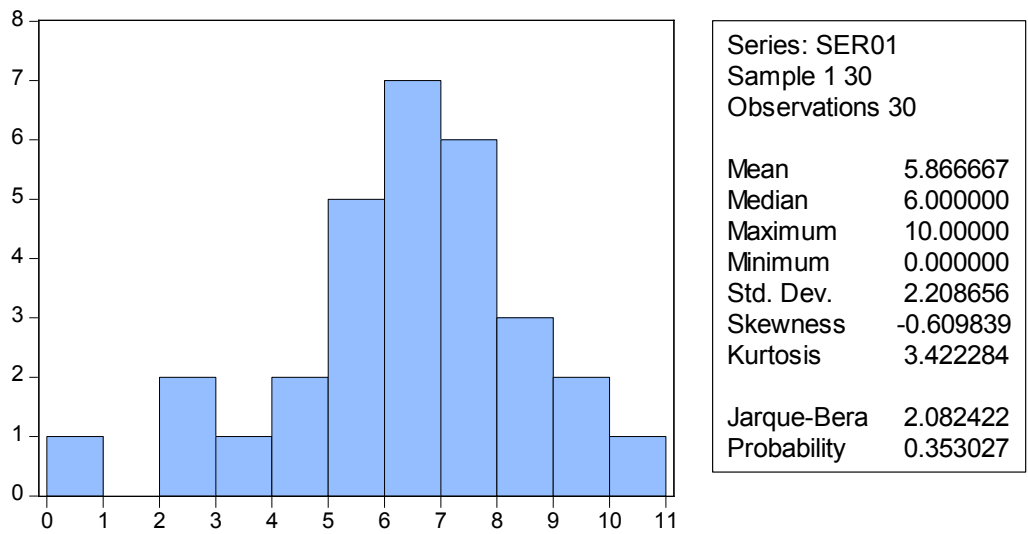


1.



a) Mean= 5.867

b) Median= 6

c) Mode= 6

Also in E-Views, go to View, One-Way tabulation:

Tabulation of SER01  
 Date: 01/14/11 Time: 17:25  
 Sample: 1 30  
 Included observations: 30  
 Number of categories: 10

Value	Count	Percent	Cumulative Count	Cumulative Percent
0	1	3.33	1	3.33
2	2	6.67	3	10.00
3	1	3.33	4	13.33
4	2	6.67	6	20.00
5	5	16.67	11	36.67
6	7	23.33	18	60.00
7	6	20.00	24	80.00
8	3	10.00	27	90.00
9	2	6.67	29	96.67
10	1	3.33	30	100.00
Total	30	100.00	30	100.00

**d) Variance= 4.878**

**e) Standard deviation= 2.209**

**f) Skewness=-0.059**

Skewness can be calculated in various ways; here:  $\text{Skewness} = (\text{Mean} - \text{Median}) / \text{Std. dv.}$

**g) Probability distribution:** see histogram above.

## 2.

a) To get a table of the 3 groups in E-Views it is necessary to open the 3 series as a group and then go to View- Descriptive Stats- Individual samples.

	GRUPO1	GRUPO2	GRUPO3
Mean	4.200000	6.950000	5.000000
Median	4.500000	8.000000	5.000000
Maximum	9.000000	10.00000	10.00000
Minimum	0.000000	0.000000	0.000000
Std. Dev.	2.525658	2.704285	2.427908
Skewness	0.211557	-1.108968	-1.80E-17
Kurtosis	2.541123	3.525837	3.125000
Jarque-Bera	0.324661	4.329786	0.013021
Probability	0.850160	0.114762	0.993511
Sum	84.00000	139.0000	100.0000
Sum Sq. Dev.	121.2000	138.9500	112.0000
Observations	20	20	20

b) The asymmetry coefficient (skewness) is positive in the first group (0211) and negative in the second (1108). This indicates that the second group did better. When the coefficient of skewness is positive, most of the observations are located to the left of the mean. Correspondingly, when the coefficient of skewness is negative, most of the observations are located to the right of the mean.

c) The performance was more similar among students in group 3. The measure we use to justify this response is the standard deviation. Naturally, the grading scale in all three groups is the same, so we can directly compare the standard deviation in each group. In this case, the standard deviation of group 3 is lower than that of group 1, which indicates that there is less variability in ratings of this group.

3. Assuming a symmetrical distribution in both groups so the mean, median and mode are the same for each of the distributions, the drawing must have the following characteristics:

(i) The average of the group A must be to the right of the mean of group B.

(ii) The histogram of group A should show a greater dispersion than that of group B (distribution for A should be flatter).

(iii) The vertical axis should read "relative frequency" and the horizontal axis "sales (units per week)."