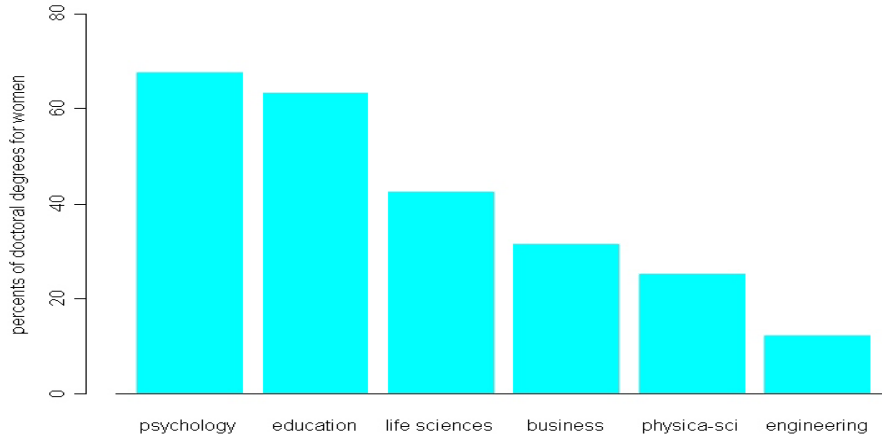


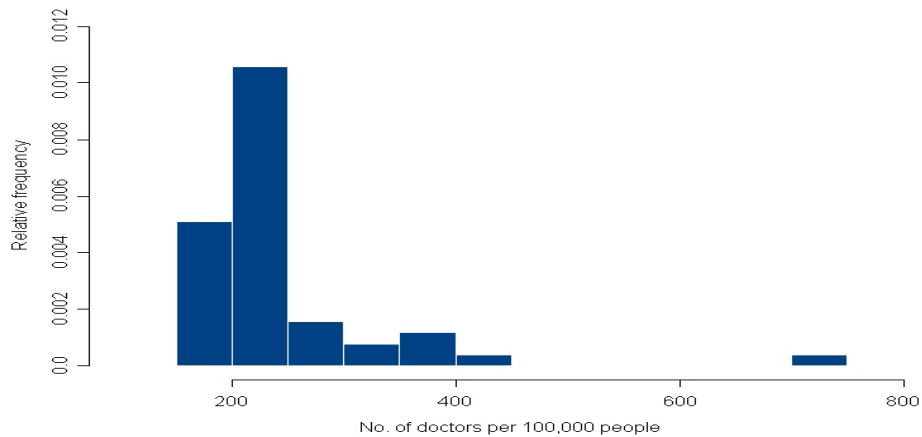
Question 1 (P25, 1.14)

- (a) The percents do not add to 100% because they are not a breakdown of all women's degrees. So the percentages given are not a breakdown of a total.
- (b)



Question 2 (P30, 1.28)

- (a) The populations of the states vary widely. It should be expected that there are many more doctors in New York or California than in Wyoming. Health care is better described in terms of the number of residents who are to be served by each doctor.
- (b) The distribution is unimodal, very skewed to the right. From the plot, it seems that there is an outlier which is D.C (737). Since D.C. is just a city, not a state.



Question 3 (P32, 1.31)

(a) There are four variables: Gender is the only categorical variable. The others are quantitative.

(b) The stem-leaf plot is:

```

0 : 5
1 : 8
2 : 4
3 : 4689
4 : 0679
5 : 1259
6 : 0112249
7 : 22333556666666688899
8 : 0000222223347899
9 : 002223344556668
10 : 01678
    
```

(c) The shape is skewed left. The center is around 7.5. Most of the observations lie between 3.5 and 10. There are not suspected outliers since the three smallest values seem to trail down smoothly from the previous values.

(d) The back-to-back stemplot is as follow. Both distributions seem to peak around 7.5. The scores for males (on the right) seems more spread out, but this may be the result of more males in the data set.

Female		Male
	0	5
	1	8
	2	4
4	3	689
7	4	069
259	5	1
0124	6	129
333566889	7	22566666689
023799	8	0002222348
00356	9	2223445668
017	10	68

Question 4 (P58, 1.53)

(a) $\bar{x}=244.2$, $s=90.6$.

Min = 154, Q1 = 200.5, M = 224.5, Q3=246, Max = 412. Because the graph (refer to Question 2) is skewed, it is better to use five-number-summary to describe the data.

(c) \bar{x} and s can not reveal skewness.