

China

Northwestern Polytechnical University

School of software

Software Engineering

Chapter One

Descriptive Statistics

ASSIGNMENT

prepared by

ALI HASSAN ABDULHAKIM

2023280033

MODERN MATHS AND STATISTICS

Professor: XIE WENXIAN

1 1.4.3 :

The data in Table 1.9 are presented to illustrate the role of renewable energy consumption in the U.S. energy supply in 2007 (source: <http://www.eia.doe.gov/fuelrenewable.html>). Renewable energy consists of biomass, geothermal energy, hydroelectric energy, solar energy, and wind energy.

- (A) Construct a bar graph
- (B) Construct a Pareto chart.
- (C) Construct a pie chart.

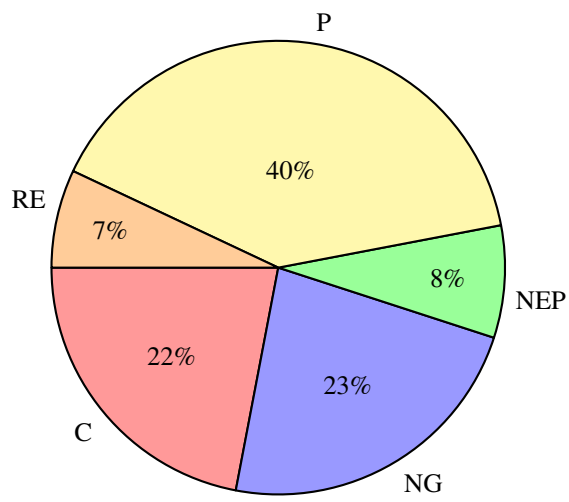
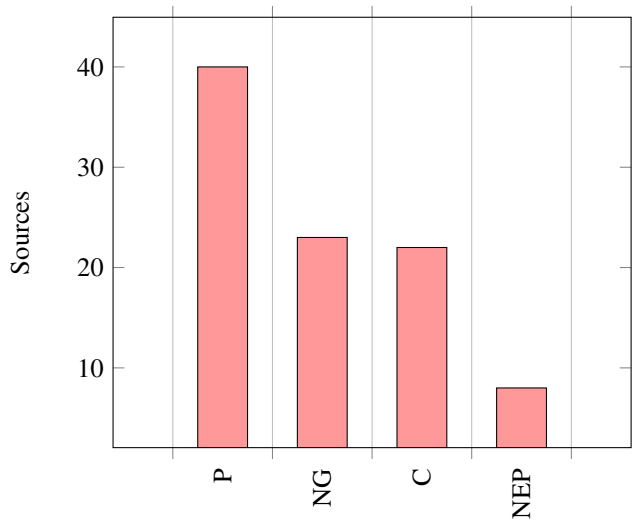
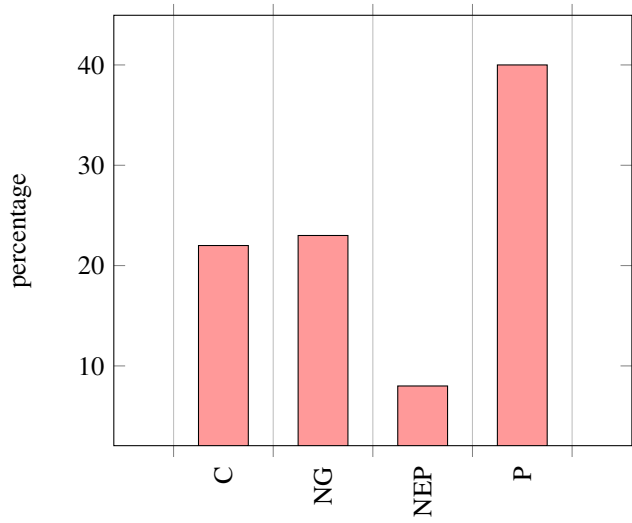
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Answer



2 1.4.14:

The following table gives radon concentrations in pCi/liter (picocurie per liter) obtained from 40 houses in a certain area.

2.9	0.6	13.5	17.1	2.8	3.8	16.0	2.1	6.4	17.2
7.9	0.5	13.7	11.5	2.9	3.6	6.1	8.8	2.2	9.4
15.9	8.8	9.8	11.5	12.3	3.7	8.9	13.0	7.9	11.7
6.2	6.9	12.8	13.7	2.7	3.5	8.3	15.9	5.1	6.0

- (A) Construct a stem-and-leaf display and interpret.
- (B) Construct a frequency histogram and interpret.
- (C) Construct a pie chart and interpret.

Answer

Stem and Leaf Plot

Stem	Leaves
0	5 6
1	5 5 7 9
2	1 2 7 8 8 9 9
3	5 6 7 8
5	1
6	0 1 2 4 9
7	9 9
8	3 8 8 9
9	4 8
11	5 5 7
12	3 8
13	0 5 7 7
15	9 9
16	0
17	1 2

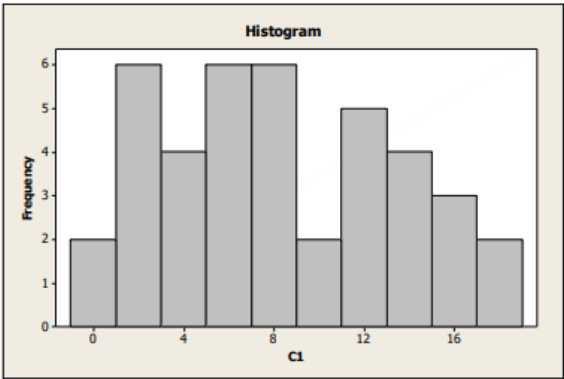


Figure 1: This is the histogram

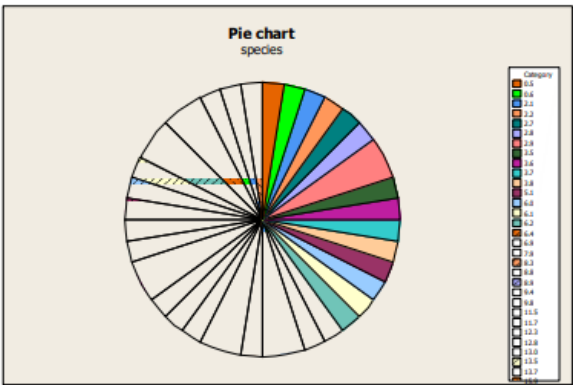


Figure 2: Pie chart