

Class Exercises for 2.a. Central Tendency

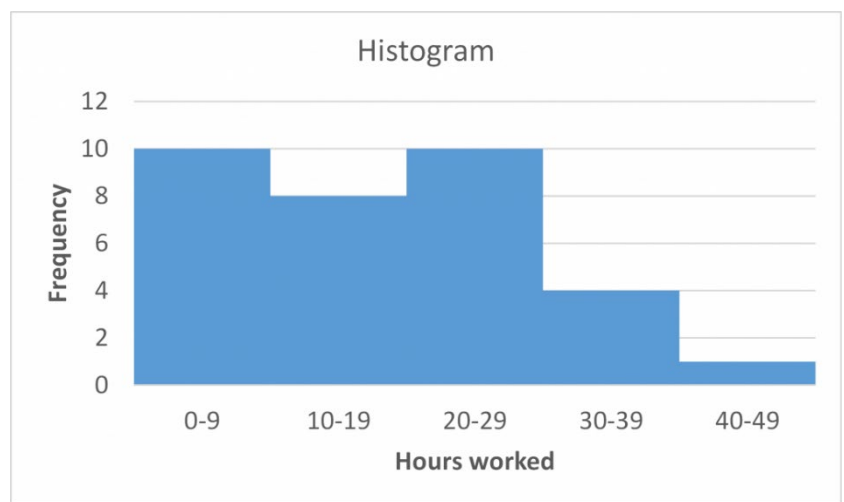
1. We will survey students in this classroom regarding the number of hours they typically work in a week to generate a dataset.

Number of work hours:

0, 0, 0, 0, 0, 0, 6, 8, 8, 8, 10, 12, 12, 14, 15, 15, 18, 20, 20, 20, 20, 22, 24, 24, 24, 25, 25, 30, 35, 36, 38, 40

- a. The frequency table and histogram for this dataset are shown below. Write down four words/phrases to describe the dataset to someone who cannot see the graphs.

Values	Frequency	Percent
0-9	10	30%
10-19	8	24%
20-29	10	30%
30-39	4	12%
40-49	1	3%



- b. Calculate the **mean** of this dataset using the formula shown here.

In English:

1. Add up all the scores
2. Divide by the number of scores

$$M = \frac{\sum X}{N}$$

M=

- c. Determine the **median** of this dataset.

1. Count how many scores there are in the dataset.
2. If odd, take the middle number.
3. If even, take the average of the two middle numbers.

Median=

- d. Determine the **mode** of this dataset..

1. Determine which score has the highest frequency in the dataset.
2. (There can be multiple modes in a dataset.)

Mode=

- 18, 20, 21, 22, 23, 23, 24, 28, 28, 29, 32, 37, 39

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18		
19		
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39		

- $$M = \frac{\sum X}{N}$$

- Median=

- Mode=

- 6, 7, 9, 10, 11, 12, 12, 13, 13, 13, 15, 16

Median=

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