

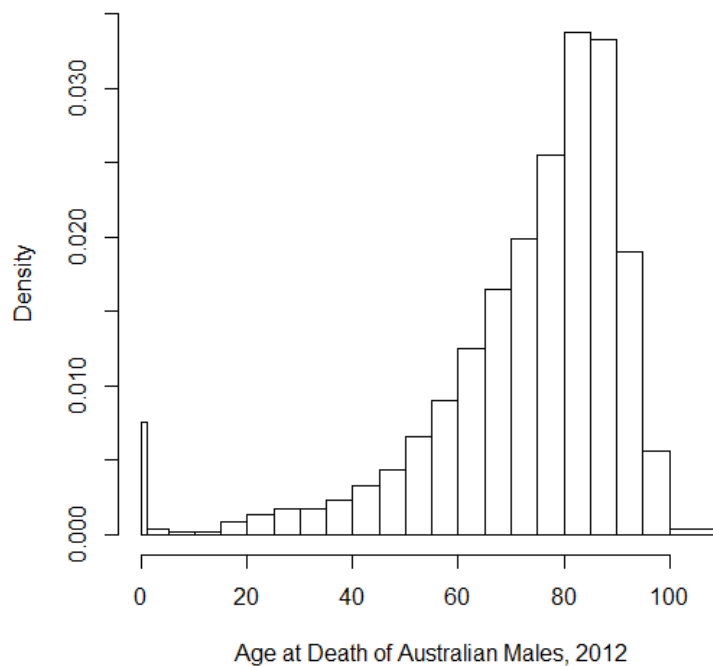


# Statistics

## Exercises 3

1. The following histogram shows age at death for Australian men who died in 2012 and is typical of the distribution of death ages in developed, Western countries but not in undeveloped countries.

**Histogram of Age at Death of Australian Males, 2012**



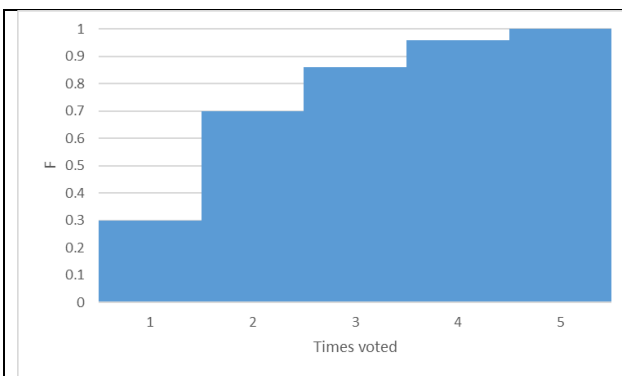
Not all the bars of this histogram are the same width. Therefore:

- a) The heights of the bars are just proportional to frequency like any other histogram.
- b) The heights of the bars are calculated according to the formula:  
 $\text{height} = \text{frequency} \times \text{width}.$
- c) The heights of the bars are calculated according to the formula:  
 $\text{height} = \text{frequency} / \text{width}.$
- d) None of the above.

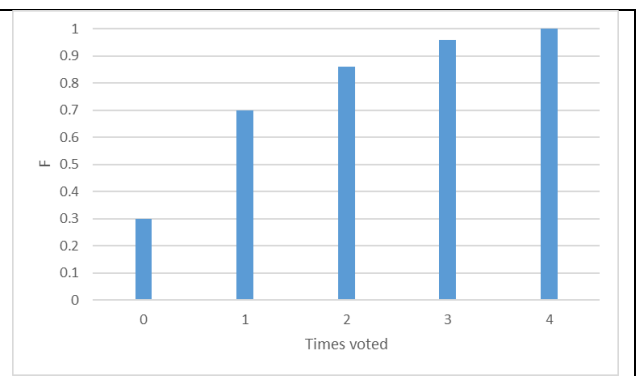
2. The following table summarizes the number of times that a sample of 100 Madrileños have voted in the local elections.

Times voted	Absolute frequency
0	30
1	40
2	16
3	10
4	4
Total	100

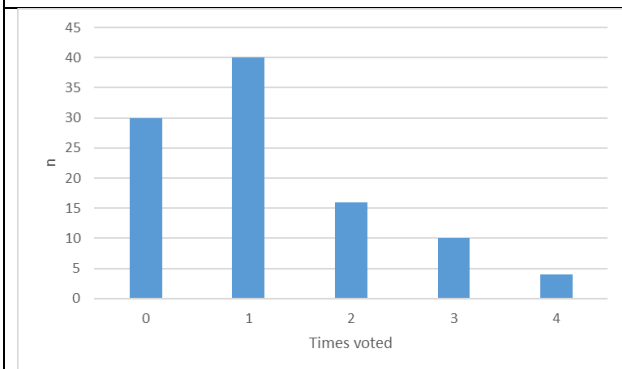
Which of the following graphics is appropriate to represent the cumulative relative frequencies of this data?



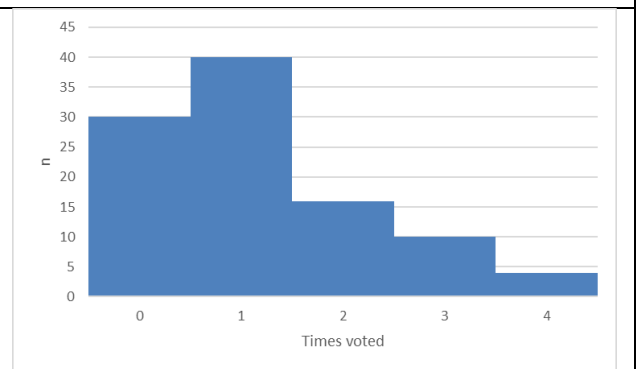
a)



b)

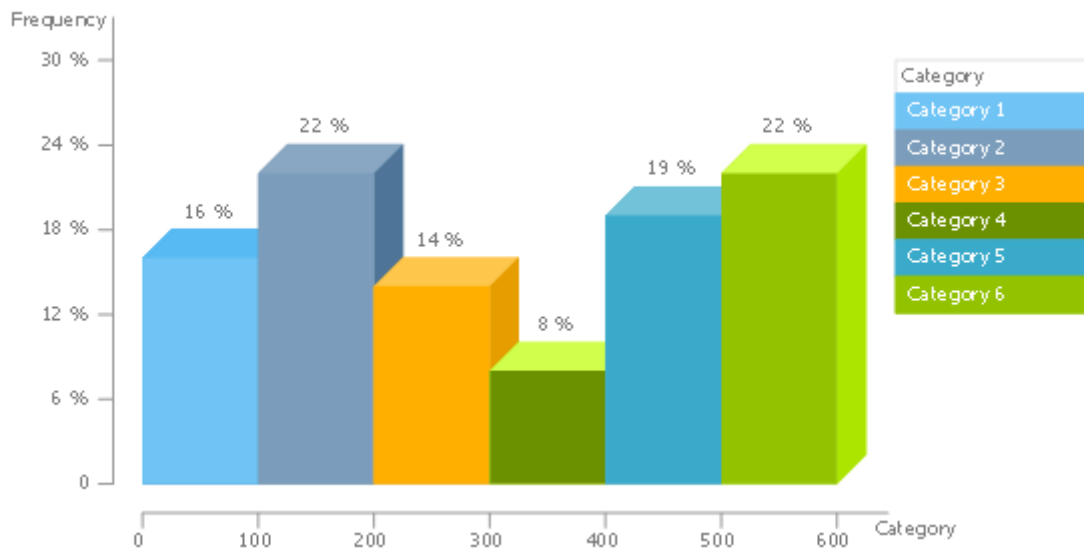


c)



d)

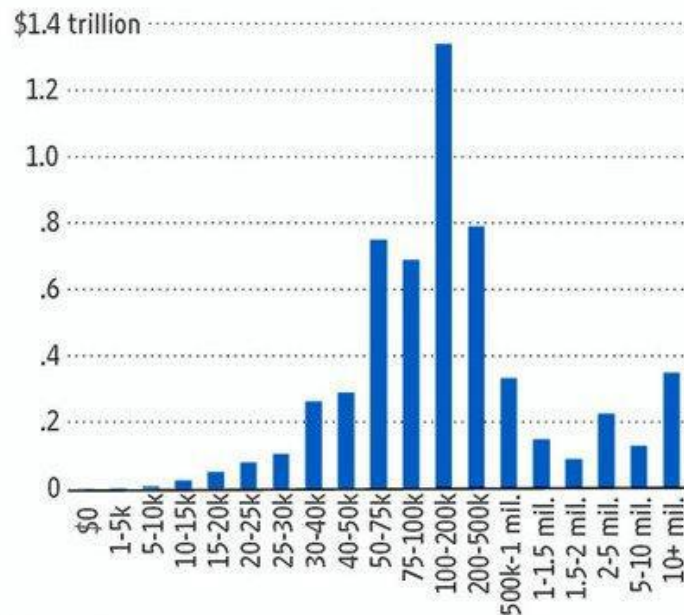
3. The following histogram was produced by a student. Comment briefly on the good and bad points of the graphic.



4. The following graph appeared in an article of the Wall Street Journal on US tax levels.

### The Middle Class Tax Target

The amount of total taxable income (left scale) for all filers by adjusted gross income level for 2008



Source: IRS

Comment on the graphic. What do you think is good and bad about it? Are there any alternatives that might be considered?

