## Statistics test

Fri 17th November 23

Exercise 1. Compute the mean and the median for the $L D L$ cholesterol level in a sample of ten heart patients:

| 132 | 139 | 162 | 147 | 133 |
| :--- | :--- | :--- | :--- | :--- |
| 160 | 145 | 150 | 148 | 153. |

What is the range?

Exercise 2. In a particular kitchen appliance store an electric automatic rice cooker is a popular item. The weekly sales for the last 20 weeks are shown :

| 0 | 15 | 15 | 19 | 15 | 17 | 19 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | 14 | 16 | 12 | 15 | 14 | 16 |
| 13 | 16 | 18 | 18 | 9 | 15. |  |

Construct a frequency histogram with classes 6-10, 11-15, and 16-20.
What are the mean and median sales?

Exercise 3. A man tosses a coin repeatedly until it lands heads and records the number of tosses required. (For example, if it lands heads on the first toss he records a 1 ; if it lands tails on the first two tosses and heads on the third he records a 3.) The data are shown.

| value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| frequency | 384 | 208 | 98 | 56 | 28 | 12 | 8 | 2 | 3 | 1 |

Find the mean and median number of tosses required.

