 Do supermarkets lie?

By law, the weight of a product must be recorded on its packaging, but is it correct?

1. Find 10 un-opened items at home.
2. Use kitchen scales to weigh each item.
3. Fill in a table similar to the one below to show the actual weight of the item.
4. Use positive and negative numbers to show whether the actual weight was above or below the listed weighted and by how far.
5. What was the average that the items were over or under by?

| Item name | Listed weight | Actual weight | Difference |
| --- | --- | --- | --- |
| Eg Peanut butter | 250g | 240g | -10g |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Legally, a product is allowed to be slightly over or slightly under its listed weight.

Eg A 75g packet of chips can actually be between 68.25g and 81.75g

For each of your items above, calculated the minimum and maximum weights they are allowed to be using the table below

| Weight | Percentage (fraction) over or under |
| --- | --- |
| 0-100g | 9% |
| 100-300g | 4.5% |
| 300-500g | 3% |
| 500-1000g | 2% |
| 1000-15000g | 1.5% |
| 15000-50000 | 1% |