



In today's world, there is a lot of statistical information around us all the time. Every time we read an article on the Internet or see a commercial on TV, we are likely to come into contact with numbers and figures. Generally, these numbers help us make better decisions in our daily lives. For example, when we choose which movie to see, we can check the ratings and see the reviews of thousands of viewers. Similarly, when people see statistics that show fastening a seat belt greatly increases the chances of surviving a car accident, they may choose to wear one themselves. These are just a few examples of how statistical information plays an important role in our lives. However, is it safe to believe statistics exactly the way they are presented to us? Unfortunately, statistics can be misused in many ways. Let's learn about some common tricks behind

**Q1.** Fill in the blanks using words from the paragraph above.

Statistical information helps us make \_\_\_\_\_ in our daily lives.

trick [trɪk]    statistics [stætɪstɪks]    commercial [kəmərʃəl]    come into contact with  
figure [fɪɡjər]    generally [dʒənərəli]    rating [reɪtɪŋ]    review [rɪvjuː]    similarly [sɪmələri]  
fasten [fæːsən]    survive [səvvaɪv]    play an important role    present [prɪzént]  
unfortunately [ʌnfɔːrtʃənətli]    misuse [mɪsjuːz]

## Samples: How Many and Who?



On the Internet, Minjeong sees an advertisement that reads, “100% of users report brighter and softer skin with Blossom Company’s liquid facial soap.” It claims that these results are from an independent laboratory and are guaranteed by a public agency. Minjeong does not question the statistics and  
 5 buys some bottles, despite the high price. However, although Minjeong uses the soap for a few months, she does not experience any noticeable changes.

Did Minjeong just happen to buy a defective product? Or was the advertisement completely fake? When Minjeong read “100% of users,” she should have asked herself, “Where did the company get this figure?” If

10 Minjeong had read the tiny letters at the bottom of the ad, she would have found that the sample included only five people. As in this case, when a sample is not large enough to show a wide range of results, it can be misleading. By using small samples, companies can come up with any results  
 15 they want and use them for their own purposes.



### Check Your Understanding

**Q2.** What is the problem with the Blossom Company’s liquid facial soap advertisement?

sample[sæmpəl]   liquid[lɪkwɪd]   soap[səʊp]   claim[kleɪm]   independent[ɪndəpəndənt]  
 laboratory[læbrətɔːri]   guarantee[gəˈrəntiː]   agency[ˈeɪdʒənsi]   noticeable[nəʊtəsəbəl]  
 defective[dɪfɛktɪv]   a wide range of   misleading[mɪsliːdɪŋ]   purpose[pəˈrɒs]