

Don't get fooled! **Use your math**

Every year the same question: “Teacher, what is the use of this? I am not going to use Math in aaaall my life”.

One of my favourite answers is: “Math serves to avoid getting fooled”.

Next, I am going to show you three examples of tricks or lies that you can find in politics, the news or on-line scams. Can you use your math knowledge to expose the trick?

1. The “clever” boss

In 2010, deep in the worst moments of the economic crisis, I read in a newspaper a business man making this statement:

“We need to make sacrifices in order to keep your jobs. This year your wage will be reduced a 5%. But do not worry, next year there will be a 2% increase, and another 3% increase the following year. So, in three years you will be earning the same.”

Do your math and answer: Once the third year is over, the workers will earn:

- a) Same as before.
- b) More than before.
- c) Less than before.

2. The deceiving media

It is said that a picture worth a thousand words. Well, maybe you should be careful when it comes to represent information. Here you have some graphics that have appeared in several TV news programs that are twisted to make you believe something that is not exactly the truth. Can you find the trick?



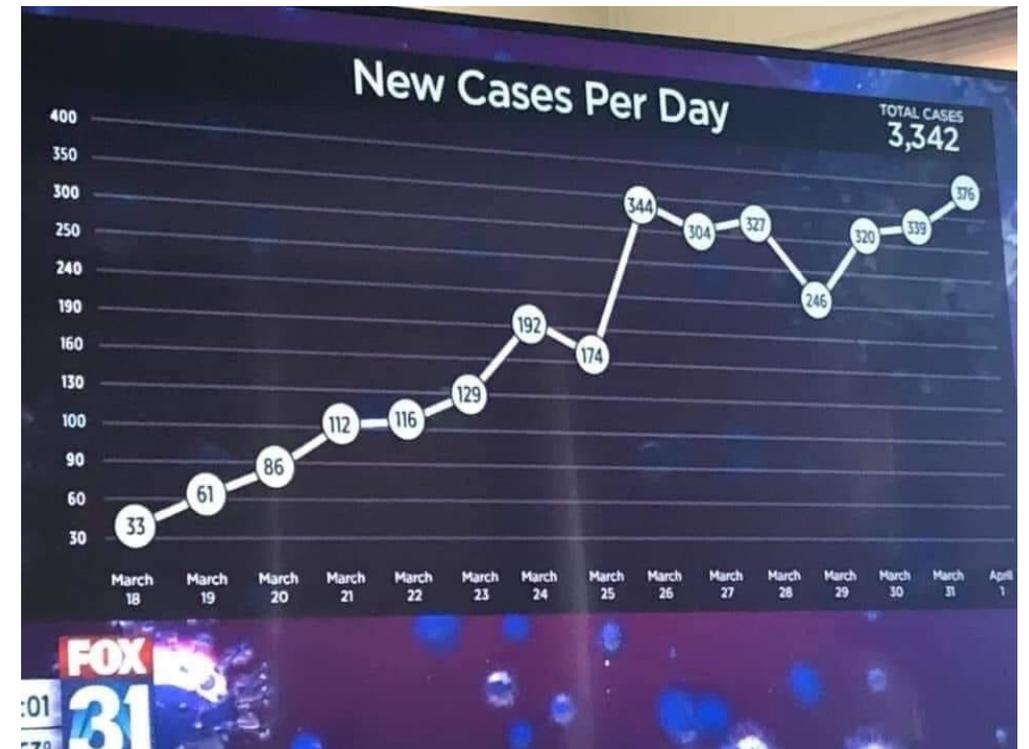
It seems that Madrid is receiving much less money than Cataluña or Andalucía. Or is not?



Well, the data in Spain is worst than in the Euro Zone, but only a few. Hey, wait, have you seen...



Some wanted to make us believe that the number of unemployment in our country was better than five years ago. It is a shame that it was not true, wasn't it?



Two manipulated graphics related to the new coronavirus menace. Can you spot the wrongdoings?

3. The betting scam

Imagine that you receive an email from someone saying that he can predict the result of a football match. And, to prove this, he says who is going to win at one of the next weekend matches.

You erase the mail (well done), but only after reading the prediction (not so well done, fellow, never open a mail from somebody you do not trust, it could be a virus or, as the case, an scam). And that Sunday the team he said win its game. Well, it may have been luck.

Next Monday you have a new mail in your in box with a new prediction... and, to your surprise, it also comes true. For six weeks, every Monday you receive a message stating the winner of a match, and every weekend the prediction comes true.

Finally, the seventh mail does not bring a prediction, but an offer. For 500 € he will give you the results of all the matches of the following weekend. It may seems a lot of money, but you can make a lot more betting at the games.

What will you say?