



PROPORTION AND STATISTICS TEST

3º ESO



Exercise 1: (1 point) I want to know how much money people in Córdoba will spend this year in presents, so I've gone to a very famous store and I've asked 200 people about it. Indicate the population, the sample, classify the random variable and tell me that this time I've done it right.

Exercise 2: (2.25 points) Given the following table showing the values and frequencies of a certain random variable

x_i	1	2	4	5	6
f_i	7	4	9	7	3

- Classify the variable (0.25)
- Find the percentage corresponding to each value of the variable (0.5)
- Find Pearson's coefficient of variation (1)
- Plot the bar diagram, the histogram and the frequency polygon (0.5)

Exercise 3: (2.25 points) Given the following table representing a random variable:

x_i	[0,4]	(4,8]	(8,12]	(12,16]
f_i	10	5	10	7

- Classify the variable and tell me how many people I asked to (0.5)
- Find the range (0.25)
- Find the measures of central tendency (1)
- Plot the frequency polygon (0.5)

Exercise 4: (1 point) A tablet costs 225€ but during the Black Friday I found these offers at two different stores:

-) Store A offers a 40% discount on the original price
 -) Store B offers a 20% discount to all products and the another 20% discount at electronic devices
- What's the price now in each one of the stores?

Exercise 5: (1 point) I've been considering to buy a house, since the price was 250000€ but now it has a 15% discount. I've been investigating for a while and I've found out that I'll have to pay a 12% of taxes over the final price and then 1200€ more to the notary. What will the final price be?

Exercise 6: (1.25 points) Split €1888 in an inversely proportional way to 2, 5 and 7

Exercise 7: (1.25 points) Seven people need twelve hours to decorate a store with fifty-eight strings of light. How long would ten people need to decorate the same space with eighty-seven strings? Express the answer using hours, minutes and seconds.

