

**BACCALAURÉAT GÉNÉRAL ET TECHNOLOGIQUE
ÉPREUVE SPÉCIFIQUE DES SECTIONS EUROPÉENNES
MATHÉMATIQUES – ANGLAIS**

SUJET 4

Thème : Percentages

Ce sujet comporte 1 page. L'usage de la calculatrice est autorisé.

"Genius is one percent inspiration and ninety-nine percent perspiration" - Thomas Edison (1847-1931).

"Baseball is ninety percent mental and the other half is physical" - Yogi Berra (1925-2015).

5 Percentages are commonly used in everyday life. These two quotations are first examples of its uses.

Politics is another example. In order to compare several candidates, it's easier to use percentages than the number of people voting for each one of them.

A percentage is simple to calculate but it's not always as simple as it seems to interpret or understand it.

10 If you increase the price of a computer by 25%, and then decide to go back to the old price, what is the decrease corresponding to this discount? Some people might answer a 25% decrease instead of the expected answer which is a 20% decrease...

Source: tomswebpage.net/images/Percentages.doc

1. Start the interview by reading the first five lines of the text ending with "uses".
2. Explain what the text deals with and comment on it.

Exercise

Jane has just bought a house and before moving in, she is going to redecorate and renovate a few things.

1. First, she wants to buy a painting. She saw one with an original price of \$120 and a 15% discount on it. Before deciding to purchase it, the salesman told her that she would have an extra 10% discount on the new price. How much is she going to pay? What is the total discount (expressed as a percentage) she will finally have on this painting?
2. She then buys a lamp for \$63. The price of the same lamp was \$56.25 last year. What is the increase as a percentage?
3. She wishes to buy a carpet but the price is \$167 and she can't afford to spend more than \$150. What is the minimum discount she needs in order to be able to purchase this carpet? Give your answer as a percentage with one decimal place.
4. She finishes with the renovation of her kitchen. Two thirds of her bill were for the furniture (with a 19.6% V.A.T included) and the rest of the bill was for the professional doing the job (with a 5.5% V.A.T included). The total bill was \$1,838.85.
What is the amount of V.A.T? What percentage of the total amount does V.A.T represent (with two decimal places)?