

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

SUJET 22

Percentages in an advertisement

Sujet comportant une page. L'usage de tout modèle de calculatrice, avec ou sans mode examen, est autorisé.

The picture on the right shows an advertisement from Paypal, an American company operating a worldwide online payments system.

The target of this ad is the sellers who propose goods you buy online. The sentence on the top of this ad in plain English means: when clients are about to shop online, every second waiting-time leads to a 7% drop in the number of potential buyers for the seller.

I. Explain what the text deals with and comment on it.

Here are few points you can reflect on.

- Size of the characters used for the figures.
- The sequence : 7, 14, 21, 28 ?
- What if a client would wait 15 seconds ?
- Main idea this ad suggests.
- ...

For every second of delay at checkout,
conversion drops up to 7%

7%...

14%...

21%...

28%...

You see where this is going?
Better checkout means more revenue.

Braintree
A Paypal Service

II. Exercise

1. Mushrooms are made of 90% water and 10% dry matter. During cooking there is a loss of 80% of the water and no loss of dry matter.
 - a. What is the percentage of water in cooked mushrooms?
Hint: the answer is not 10%!
 - b. Is your result surprising? Comment on it.
2. If the population of a town has increased by 20% in the first year and has decreased by 20% in the next year, what effect can be seen in the population of that town?
3. A cube-shaped pile of snow is melting keeping its shape. Each side has decreased by 10% so far.

What is the percentage decrease of the volume of pile of snow?

Vous devez restituer le sujet à la fin de l'épreuve