

**Subject 35**  
**Function**

**Please, don't write on the exam paper.**

In France, the tax  $T$  for one single person on earned income is calculated as follows :

$$T(x) = \begin{cases} 0 & \text{if } x \leq 5875 \\ 0.055x - 323.13 & \text{if } 5875 \leq x \leq 11720 \\ 0.14x - 1319.33 & \text{if } 11720 \leq x \leq 26030 \\ 0.3x - 5484.13 & \text{if } 26030 \leq x \leq 69783 \\ 0.4x - 12462.43 & \text{if } x \geq 69783 \end{cases}$$

( $x$  is the earned income of the person in euros)

- 1) Find the tax payable on an earned income of 10 000 €.  
Find the tax payable on an earned income of 50 000 €.
- 2) Find the earned income of Daniel knowing that the tax paid by Daniel is 8 000 €.
- 3) Find the lowest earned income such that tax paid is greater than 35% of the earned income.