

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

Corrigé 20 - Venn Diagram

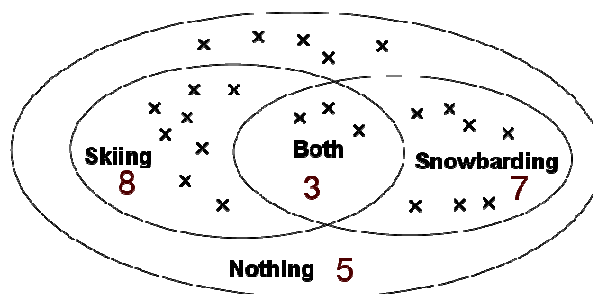
Thème : Logic and Probabilities

Corrigé du texte : Éléments à prendre en compte pour évaluer la capacité d'analyse et d'argumentation :

- He was not the inventor of the diagrams but customized them in a new purpose.
- Charles Lutwidge Dogson is better known as Lewis Carroll.
- Personal appropriation of the information

Corrigé de l'exercice :

1. a. Here is the Venn diagram corresponding to the situation :



b. So we have to add the several cardinalities : $8 + 5 + 3 + 7 = 23$ students.

2. a. We have to count the letters belonging to R and L sets : 11 letters. Then: $p(R \cap L) = \frac{11}{48}$.

Same reasoning with the letters belonging to the three sets : $p(R \cap L \cap G) = \frac{10}{48}$.

b. There are 41 letters in $R \cup L$. Then: $p(R \cup L) = \frac{41}{48}$.