

## Baccalauréat 2009 - Académie de Lille

### Epreuve de Discipline Non Linguistique Mathématiques/Anglais

#### Thème J : probabilités Sujet 9

*L'usage de la calculatrice est autorisé.*

*Temps de préparation: 20 minutes.*

***Cette planche sera à rendre à l'examineur, veuillez à ne rien écrire dessus.***

In a game , a card is taken at random from a full deck of 52 playing cards.  
It is then replaced, and a second card is taken.  
Use a tree diagram to calculate the probability that :

- 1°) **a)** both cards are diamonds.  
**b)** neither card is a diamond  
**c)** one of the card is a diamond.  
**d)** at least one card is a diamond.

2°) Answer the same questions, assuming now that the first card is not replaced in the deck.

