SUBJECT 5

Please, do not write on the exam paper.

Question 1

Students in a high school can choose to study Spanish or French as a foreign language.

In a given academic year, 90% of the pupils choose Spanish and the rest choose French.

30% of the students who learn Spanish are boys and 40% who study French are also boys.

A student is randomly selected from this academic year.

What is the probability that it is a girl?

Question 2

A class is formed by 10 boys and 10 girls. Half of the girls and half of the boys have selected French as their optional subject.

a) What is the probability that a randomly selected student is a boy or somebody who studies

French?

b) What is the probability that a randomly selected student is a girl who does not study French?

Question 3 (optional for L)

One box contains three coins. Coin 1 is standard, coin 2 has two heads and coin 3 is ***biased*** so that the probability of getting heads is 1/3.

A coin is randomly selected from the box and thrown into the air.

Find the probability of obtaining a result of heads.

Nota:
biased : truquée.