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Module: Probability and Statistics (PST)

2<sup>nd</sup> Year EM, GM

Worksheet: N°6

## Exercise 1:

Let us consider the following table of contingencies:

	0	1	2
1	4	2	1
2	5	4	3

- **1.** Determine the marginal frequency distribution of variable X, its mean and variance. Same questions for the variable Y.
- **2.** Determine the conditional distribution of Y for X=1 and the conditional mean.
- **3.** Represent these two variables graphically.

## **Exercise 2:**

On the occasion of a sports competition bringing together 18 athletes, a gold, a silver and a bronze medal are awarded.

• How many distributions are there (before the competition, of course...)?

## **Exercise 3:**

In a class of 32 students, there are 19 boys and 13 girls. Two delegates must be elected

- 1. How many choices are available?
- 2. What is the number of choices if we impose a boy and a girl
- 3. What is the number of choices if we impose 2 boys?