# Report worksheet 1

Joaquín Rapela January 17, 2023

# Exercise 1

- (a) Please refer to Figure 1.
- (b) Please refer to Figure 2.

## 40 out of 1000 tests with p<0.05

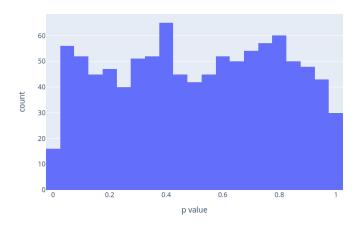
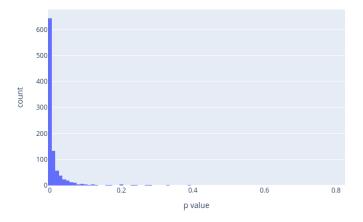


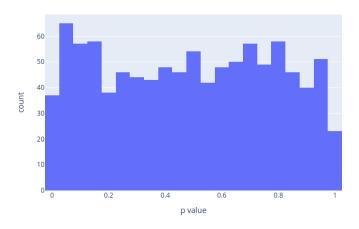
Figure 1: Exercise 1a. Histogram of p-values of 1.000 t-tests evaluating if the mean of 10.000 samples from a  $\mathcal{N}(0,1)$  is equal to zero. Click on the figure to see its interactive version.

### 907 out of 1000 tests with p<0.05



(a) Histogram of p-values of 1.000 t-tests evaluating if the mean of 10.000 samples from a  $\mathcal{N}(0.1,1)$  is equal to zero. Click on the figure to see its interactive version.

### 73 out of 1000 tests with p<0.05



(b) Histogram of p-values of 1.000 t-tests evaluating if the mean of 10.000 samples from a  $\mathcal{N}(0.01,1)$  is equal to zero. Click on the figure to see its interactive version.

Figure 2: Exercise 1b