

# Testing – 6.1 Specification testing

Michel Bierlaire

*Practice quiz*

1. If the hypothesis test does not reject the null hypothesis, we can conclude that the null hypothesis is true.
  - (a) True
  - (b) False
2. When we reject a true null hypothesis, we commit a Type I error.
  - (a) True
  - (b) False
3. When the null hypothesis is false and is not rejected, you make a type II error.
  - (a) True
  - (b) False
4. The power of a test is the probability of rejecting the null hypothesis when it is true.
  - (a) True
  - (b) False
5. If the level of significance  $\alpha$  of a test is increased, the power of the test decreases.
  - (a) True
  - (b) False

6. If a null hypothesis is rejected at the level of significance 0.01, it is also rejected at the level of significance 0.05.
- (a) True
  - (b) False
7. For a given level of significance, if the sample size is increased, the power of the test decreases.
- (a) True
  - (b) False