



## 1 Basic exercises

1 Grimaldi's book (5. ed.): study and discuss **The Laws of Logic** (page 58-59) and the table 2.19 (page 78).

2 Grimaldi's book (5. ed., Exercises 2.2, page 66): solve **Exercise 6**

3 Grimaldi's book (5. ed., Exercises 2.2, page 66): solve **Exercise 18**

4 Is the following argument valid?

$$(p \rightarrow \neg q) \wedge (r \rightarrow q) \wedge r \implies \neg p$$

Detail all steps of your reasoning.

5 Grimaldi's book (5. ed., Exercises 2.3, page 85): solve **Exercises 8**

6 Grimaldi's book (5. ed., Exercises 2.3, page 85): solve **Exercises 10**

7 Grimaldi's book (5. ed., Exercises 2.3, page 85): solve **Exercises 11 a,b**