# 2.2 Regarding Systematic black-box testing

#### 2.2.1 Regarding the theory

The cory theory is the definition of the EC and its core properties (coverage, representation), the process of finding test cases using EC partitioning (FRS 34.2.3), and Myers heuristics for invalid and valid ECs. Also the heuristics for finding ECs (range, set, boolean heuristics) are important.

As always, just learning the definitions by heart is not that interesting, but understanding why is more so. The *representation* property is key to understanding the EC technique.

Remember also that FRS Chapter 2 contains the basic terminology of testing—it is a good idea to review what a *test case* really is.

#### 2.2.2 Regarding solving the exercise

Be sure to read the exercise so you solve the right exercise...

Look for conditions in the specification and apply the heuristics (range, set, boolean / FRS 34.2.1) on them to get a first rough guess at the ECs. If there are many conditions, them pick just some of them, so you have time also to use the technique to generate some of the test cases using Myers two heuristics (p. 405).

Either prepare your EC and test case tables in a diagram editor, or write them on the whiteboard as you explain your reasoning.

## 2.3 Regarding Variability management

### 2.3.1 Regarding the theory

Chapter 7 / Strategy outlines the four classic techniques for handling variability: source code copy, parametric, polymorphic, and compositional, and discusses their benefits and liabilities.

It is also adviceable to have a good understanding of the 3-1-2 process and the underlying compositional design principles.

## 2.3.2 Regarding solving the exercise

Be sure to read the exercise so you solve the right exercise...

Look for the variability points in the exercise! What is it that you need to support in two or more variations?