In order to compute the center of gravity of composed figures we can use the Varignon's theorem. We need:

- Measure of the area of each component (elementary area).
- Total area A<sub>tot</sub>, which is obtained as sum of the elementary areas.
- Center of gravity of each elementary area.

$$x_{COG} = \frac{\sum_{i} A_{i} x_{COGi}}{A_{tot}}$$

$$y_{CoG} = \frac{\sum_{i} A_{i} y_{CoGi}}{A_{tot}}$$

Therefore, once we shaped shop D (see Craft Example in the slide's lesson), we can identify two possibles alternatives:



