«Introduction to Mechanical Engineering»
Quiz 1

Task 1

1. What does it mean? You should explain each part of this notation (fig. 1).
2. Using which 4 basic operations you can design almost any solid part in CAD. Explain your choice with an example.

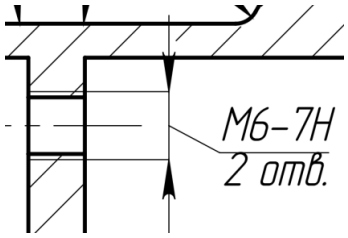
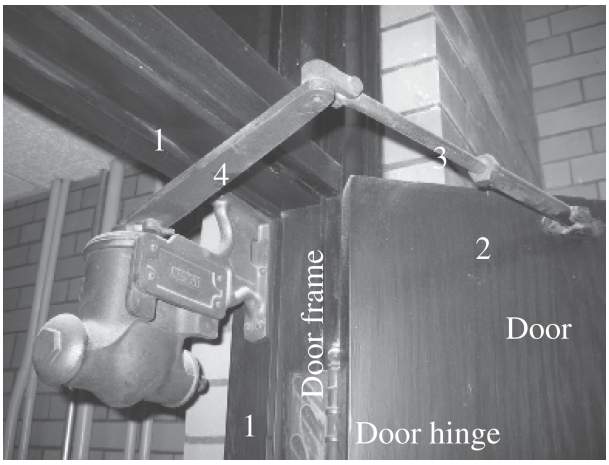


Figure 1: Task 1.1

Task 2

1. What the difference between lower and higher kinematic pairs. Provide examples of both types, using kinematic scheme notation.
2. Draw a kinematic schemes of the mechanisms (fig. 2).



(a) Door closer

(b) 6R Manipulator

Figure 2: Task 2.2

Task 3

1. Provide at least 4 types of drives. Pros and cons.