**Using ExpertPRIZ environment**

**Exercise nr. 1**

User interface and solver.

1. Let use the main menu and submenus of ExpertPRIZ, run the expertsystem DEMO
2. Create concepts of geometry and store they into concept knowledge base
3. Solve exercises from geometry:

3.1 The diagonal of the square is 7. Find area of figure.

3.2 The diameter of the circle is 10. Find area of striped corner.

3.3 The perimeter of the largest circle is 20 cm. The radius of the central circle is 2 time longer as the radius of the smallest circle. The radius of the largest circle is 3 time longer as the radius of smallest circle. Find the area of striped figure.

1. Store the concepts of physics into the conceptual knowledge base
2. Solve exercises from physics

5.1 What should be the power of an aircraft engine to rise a plane that weighs 3 tons (mass) to 1 km height in 1 minute?

Mass M=3 t

Time DT=1 min=60sec

Height H=1km=1000m

5.2 Escalator in St. Petersburg metro station will drive a standing person up in 2 minutes. It takes 6 minutes for the person to walk up an inoperative escalator stairs. How long will it take to reach the top walking on the moving escalator if the length of the escalator is 100 meters?