

The short test 2 - Mechanics A, B and C

1. Use the words from the box in the right position in the sentences:

| | | | | | | |
|-------|---------|-------|--------------|---------------|--------------|-----------|
| fluid | inertia | rigid | aerodynamics | reformulation | relationship | mechanics |
|-------|---------|-------|--------------|---------------|--------------|-----------|

In classical _____, analytical dynamics, or more briefly dynamics, is concerned with the _____ between motion of bodies and its causes, namely the forces acting on the bodies and the properties of the bodies, particularly mass and the moment of _____. The foundation of modern-day dynamics is Newtonian mechanics and its _____ as Lagrangian mechanics and Hamiltonian mechanics. _____ dynamics is a subdiscipline of fluid mechanics that describes the flow of fluids—liquids and gases. It has several subdisciplines, including _____ (the study of air and other gases in motion) and hydrodynamics (the study of liquids in motion). _____ body dynamics studies the movement of systems of interconnected bodies under the action of external forces.

2. Write:

Fluid dynamics is divided into:

1. _____
2. _____
3. _____
4. _____

3. Answer the question:

1. What does aerodynamics study?