

Required Mathematics and Physics Knowledge Tests

General

In order to start training for the JAA ATPL(A) it is necessary to demonstrate a good knowledge of Mathematics and Physics. This is achieved by testing the student with 3 separate test papers. In order to prepare for the tests the student should revise the following topics from prior education.

Mathematics

Arithmetic calculations without calculator including:

1. Order of Operation
2. Percentages
3. Decimals
4. Fractions
5. Square Roots

Calculations with calculator including:

1. Ratios
2. Areas and Volumes
3. Factorisation
4. Scientific Notation
5. Simple Algebraic Equations
6. Co-ordinate systems and Graphs
7. Trigonometry
8. Pythagoras
9. Speed, Distance, Time Calculations

Physics

1. Relationship between Volume and Mass (Specific Gravity)
2. Density and Mass Relationship
3. Force, Power and Work Formulae
4. Arm and Lever
5. Potential and Kinetic Energy
6. Atmospheric Properties
7. Venturi Effect
8. Standard Scientific Units of Measurement

This list is only a guide and other basic Mathematics and Physics knowledge may also be tested

Test Papers

There are 3 tests papers - one which is mathematics with no calculator (30 questions in 10 minutes), one which is practical mathematics problems (10 - 15 questions 30 - 45 minutes) and one which is basic physics problems (10 - 15 questions in 30 - 45 minutes).

The tests are done under examination conditions and the answers are written not multiple choice. The pass mark is 75%.