Part III

Basic Principles of Computational Gasdynamics

Computational gasdynamics combines the gasdynamics described in Part I with the computational techniques described in Part II. Part III concerns the basic principles of computational gasdynamics including conservation, the CFL condition, artificial viscosity, stability, and upwinding. The rest of the book relies heavily on the theory seen in Part III. Some readers may find a few passages in this part of the book a bit dry; they have permission to skip ahead and come back as necessary.