

Numerous annotated solved examples are provided that feature the solution methodology presented in Sec. 1.7.3 and illustrated in Example 1.1. We encourage you to study these examples, including the accompanying comments.

Less formal examples are given throughout the text. They open with for example. . . and close with . These examples also should be studied.

#### Exercises

Each chapter has a set of discussion questions under the heading Exercises: Things Engineers Think About that may be done on an individual or small-group basis. They are intended to allow you to gain a deeper understanding of the text material, think critically, and test yourself.

A large number of end-of-chapter problems also are provided under the heading Problems: Developing Engineering Skills. The problems are sequenced to coordinate with the subject matter and are listed in increasing order of difficulty. The problems are also classified under headings to expedite the process of selecting review problems to solve.

Answers to selected problems are provided in the appendix (pp. 865–868).

Because one purpose of this book is to help you prepare to use thermodynamics in engineering practice, design considerations related to thermodynamics are included.

Every chapter has a set of problems under the heading Design and Open Ended Problems: Exploring Engineering Practice that provide brief design experiences to help you develop creativity and engineering judgment. They also provide opportunities to practice communication skills.