1 Grammar

For each word group, one of the following errors exists: run-on sentence (abbreviated RO, pages: 258–259), faulty parallelism (abbreviated FP, page: 259), or unclear pronoun reference (abbreviated UP, page: 93). Identify and correct each error.

1. The program has to be initialized to a known state, otherwise, the rotations will yield unpredictable results.

2. Although design flaws in the Titanic were realized soon after its sinking in 1912, the reasons for the severe damage inflicted by the iceberg remained a mystery until its discovery in 1985.

3. Once the earthquake has subsided, the danger is not over. For instance, striking a match or any open flame may cause a gas explosion.

4. This problem could have been solved by a change of the hardware, however, a software solution proved to be satisfactory and was easier to carry out.

5. One problem that has baffled engineers since the invention of the catalytic converter is their lack of effectiveness in oxidizing CO and HC while the engine warms.

6. The decoder was either faster than the worst case specified by the manufacturer, or the HC11 held the data longer than the minimum time specified by Motorola.

7. The initial wiring of the LED was not correct, therefore, our display did not work as it should have.

8. Good statistical control is achieved when the plotted values are normally distributed around the average, remain within the control limits, and the data exhibit no indications of cycles.

9. Scientists have problems assuring that the viral vectors apply themselves to the correct cells. When implanted, they tend to migrate throughout the body and miss targeted cells more often than not.

10. The write pulse width of the EEPROM must be less than the high pulse width of the HC11’s E clock, otherwise, the data may not be accessed by the EEPROM in time.
11. The objectives of the Viking mission were to obtain high-resolution images of the Martian surface, characterize the structure of the atmosphere and surface, and to search for evidence of life.

2  Punctuation

In each sentence below, one and only one piece of punctuation is undesired (UP), is missing (MP), or should be changed (CP). Changes consist of movement within the sentence or replacement by another piece of punctuation. Identify and correct each error.

1. The new conductor, which will be available next week is composed of barium, copper, and oxygen.

2. As World War II escalated the United States became locked into a race with Germany to develop an atomic bomb.

3. Every year, an earthquake of magnitude between 8.0 and 8.9 on the Richter scale, will be experienced somewhere in the world.

4. The three largest divisions are: production, marketing, and research and development.

5. The synergistic reactor contains a chamber in which the exhaust from the burning coal mixes with limestone, see Appendix A.

6. According to Dr. D. Simpson [1986], a biologist at the Harvard Medical School, “Only 30,000 rads are needed for interphase death to occur in yeast cells”.

7. The transmission fluid serves as a medium for hydrodynamic energy in the torque converter, hydrostatic energy in the servos and logic circuits and sliding friction energy in the clutches.

8. The concentrations of these gases, which are called greenhouse gases control how much infrared radiation escapes.

9. As the flame front propagates hot combustion products expand, resulting in a rapid pressure increase.

3  Usage

Circle the correct word choice. Points will be deducted from incorrect guesses.

1. We produced a small (amount, number) of automobiles this year, even (fewer, less) than last year.

2. The serum, which was (comprised, composed) of two antigens, (affected, effected) his liver.
3. The talk centered (around, on) the (principal, principle) of virtual work.

4. Last year, General Motors increased (its, it’s) advertisements and (lead, led) the world in automobile sales.

5. Over the past two weeks, our team made (continual, continuous) changes to the design.

6. The side (affect, effect) from the drug was the (principal, principle) reason for choosing another treatment.

7. The airfield looked much (as, like) it did when the Hindenburg exploded almost fifty years ago.

8. When you receive my (boss’, boss’s) memo requesting your participation, please respond to her that your job description, as written, will not allow you to perform that type of work.

9. The criteria for assessing the effectiveness of our design (are, is) given in the next section.

10. The double bottom on ships is constructed by taking two layers of steel that span the length of the ship and separating those layers by (5, five) feet.

These examples were taken from the Writing Guidelines for Engineering and Science Students by Penn State University.