

Exam Practice Problems (Computer)

Computer based problems from previous exams are found below. Your exam will **NOT** have a computer portion. However, the content presented in these problems is applicable. Understanding and being able to work these problems will benefit you in your preparation for the exam for both the three and five point questions.

1. Write a sketch that will make an LED turn on each time the instructor presses a whisker. The LED should blink in the same pattern each time: On for a quarter-second, off for a half-second, and on for a half-second.
2. Develop a spreadsheet that creates a table of values of the sine and the cosine of an angle. The angles should range from 0° to 360° in increments of 10° . Format the table by showing units in the headings for each column, bolding the headers, and formatting the numbers in the sine and cosine columns to show 3 decimal places to the right of the decimal point. Plot both the sine and cosine against the angle. Be sure to format the graph with proper engineering format.

Exam Practice Problems (Work-Out)

A work-out problem from a previous exam is found below. **Your exam will only consist of multiple choice problems.** However, the content presented in this problems is applicable. Understanding and being able to work this problem will benefit you in your preparation for the exam.

1. Given that $V = 5V$, $R_1 = 100\Omega$, $R_2 = 50\Omega$, and $R_3 = 150\Omega$, find
 - a. I
 - b. The total power generated by V

