This project is worth ten points, distributed as indicated. You must show your work to receive full credit; partial credit will be awarded where appropriate. You are encouraged to work with your classmates on the project; however, you must turn in your own work—copying solutions without understanding the techniques will not be to your benefit. The project is due Wednesday, October 10.

Read pages 120–124; pay particular attention to the examples. Read examples 9 and 13 from §2.3. Use the examples as models to solve the following application problems.

1. The sum of three consecutive integers is 144. Find the three numbers. [2 pts]

2. The length of a rectangular label is 3 cm less than twice the width. The perimeter is 54 cm. Find the dimensions of the label. [2 pts]

3. Russ and Janet are running the Race for the Cure fun run. Russ runs at 7 mph, Janet at 5 mph. If they start at the same time, how long will it be before they are 1/2 mi. apart? [2 pts]

4. Suppose that upon graduation from college, you receive two job offers. One carries a combined annual salary and benefit package of $28,000, whereas the other has a benefit package of $6000, which represents 27% of the annual salary. Which job has the larger total salary and benefit package? [2 pts]

5. A 10-ft U-Haul moving truck can be rented in Evansville for $19.95 per day, plus $0.69 per mile. Thus the total cost for one day can be expressed as

\[ C = 19.95 + 0.69x, \]

where \( x \) represents the number of miles traveled. What range of miles can be traveled if the total rental expense must be between $75 and $100? [2 pts]