

Module 7 Lesson 6

Share 6

6. The descriptions of the three noted situations should be familiar to you.
- **Situation 1:** At a fast food restaurant, one customer buys three hamburgers and two cheeseburgers for a total of \$12.35. Another customer buys five hamburgers and three cheeseburgers for \$19.52. Assuming GST is included, determine the cost of each kind of burger.
 - **Situation 2:** The perimeter of a lawn is 28 m. The length of the lawn is 1 m less than twice the width. Determine the length and width of the lawn.
 - **Situation 3:** Happy Trails trail mix contains 75% peanuts. Wanderer trail mix contains 55% peanuts. How much of each kind, in grams, must be mixed together to create 500 g of trail mix containing 60% peanuts?

These are the same situations that you modelled with linear systems in Lesson 2. Retrieve your work related to these situations from your course folder. Now you are ready to solve these problems.

As a way to practise each of the strategies that you learned in this module, work with a partner (if possible) to solve each system using a **different** method. Choose graphing, substitution, or elimination for your strategy.

Refer to the documents that you have created from prior lessons to assist you during your evaluation of different strategies. You may want to review all of the situations before you begin so you can plan which strategies you will use in each case. As part of your solution, provide reasons to support your decision to use a particular strategy.