

Preview Pg.47#1 – 10,12,14

U2 – Using Linear Systems to Solve Problems

U2L1 – 1.1 Modelling with Linear Equations

Students will write equations to model a variety of situations.

Examples

1. The Sarnia Minor Hockey Association would like to rent a banquet hall for their annual awards dinner. They have received two quotes.

The Lambton Inn charges \$500 to rent the room, plus \$15 for each meal.

The Dante Club charges \$400 for the hall, plus \$18 for each meal.

Create a linear system to determine when both places cost the same.

2. The difference between two numbers is 45. Three times the larger number less five times the smaller number equals 75. Create a linear system to find the numbers.

3. Yasmin has \$8000 to invest and would like to earn \$500 from the money. How much should she invest in a stock that been getting a 10% annual return and how much should she invest in savings bonds that pay 4% annual interest? Create a linear system to find out how much money she should invest in each type of investment.

4. Joe traveled the 95km from Oakville to Oshawa by car and GO train. The car averaged 60km/h, and the train averaged 90km/h. The whole trip took 1.5h. Create a linear system to determine how much time he spent in the car and on the train.