

## Module 5 – Systems of Linear Equations and Inequalities

### Lesson 4 – Application: Systems of Linear Equations in Two Variables

Name \_\_\_\_\_

Solve the following problems. Show your solution.

#### Age Problems

1. Maureen is twice as old as Mary is. Five years later, she will be 10 years older than Mary. Find the present age of each girl.
2. Butch is two-thirds as old as JC. In seven years, Butch will be three-fourths as old as JC. How old are they now?

#### Motion Problems

1. What is the speed of Jackie's boat in still water if she can make a 120km trip in 6 hours and if the rate of the current is 3kph?
2. An airplane can travel a distance of 6000km in 6 hours with the wind. The return trip against the same wind takes 7.5 hours. What are the rate of the airplane and the rate of the wind?