

Math 10C
Systems HW

Name _____

Date _____

1. Solve the following systems.

a) $2x + y = 4$
 $2x - y = 8$

b) $x + 2y = 6$
 $3x + y = -7$

2. Define the variables and write the equations you would use to solve the following problem.
DO NOT SOLVE!

A person invests a total of \$5000. Part of the \$5000 was invested at 6% per annum and the rest at 8% per annum. After one year, the total interest earned was \$376. How much was invested at each rate.

3. During a sale at a clothing store, three shirts and one hat cost \$121, but two shirts and three hats cost \$139. Use the following information to determine the sale price of one shirt and one hat.

The cost of 1 shirt = s

The cost of 1 hat = h

$$3s + h = 121$$

$$2s + 3h = 139$$

4. For a hockey game, 4000 tickets were sold. The tickets cost \$15 for an adult and \$10 for a student. The total value of the ticket sales was \$51000. Determine the number of adults and students who attended the competition.

variables: number of adult tickets sold =

 number of student tickets sold =

equation for tickets sold:

equation for revenue:

Solve: