

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

*Sec 1H Unit 4 Day 3 - Solving Systems using Combinations Classwork*

**1.** Jennie bought 4 pens and 3 pencils for \$3.75. Bill bought 4 pens and 6 pencils for \$4.50. How much does a pencil cost and how much does a pen cost?

*Write a pair of equations for the situation and explain how you got your answer.*

**2.** Sonia bought 5 oranges and 3 bananas for \$1.75. Ellen bought 10 oranges and 7 bananas for \$3.80. How much does an orange cost and how much does a banana cost?

*Write a pair of equations for the situation and explain how you got your answer.*

**3.** Trisha and Byron are washing and vacuuming cars to raise money for a class trip. Trisha raised \$38 washing 5 cars and vacuuming 4 cars. Byron raised \$28 by washing 4 cars and vacuuming 2 cars. Find the amount they charged to wash a car and vacuum a car.

*Write a pair of equations for the situation and explain how you got your answer.*

**4.** On Monday, Arnold paid \$3.40 for three donuts and two hot chocolates. On Tuesday, he paid \$3.60 for two donuts and three hot chocolates. On Wednesday, he bought one donut and one hot chocolate. What was his bill for one donut and one hot chocolate?

*Write a pair of equations for the situation and explain how you got your answer.*

Use what you learned from the previous problems to solve the following systems of equations.

$$5. \begin{cases} 2x + 3y = 4 \\ 5x + 3y = -8 \end{cases}$$

$$6. \begin{cases} 2x + 6y = 7 \\ 3x - 2y = 5 \end{cases}$$

$$7. \begin{cases} 4x + 7y = 54 \\ -36x - 45y = 54 \end{cases}$$

$$8. \begin{cases} 7x + 19y = -27 \\ 5x + 6y = 11 \end{cases}$$