Algebra 2	
System of Equations – 3 Variable	

Name:	
Date:	Period:

Solve each system of equations. Please remember to define your variables.

1.) Phoebe has some 32-cent stamps, some 29-cent stamps, and some 3-cent stamps. The number of 29-cent stamps is 10 less than the number of 32-cent stamps, while the number of 3-cent stamps is 5 less than the number of 29-cent stamps. The total value of the stamps is \$9.45. How many of each stamp does she have?

2.) Billy's Restaurant ordered 200 flowers for Mother's Day. They ordered carnations at \$1.50 each, roses at \$3.75 each, and daisies at \$2.60 each. They ordered mostly carnations, and 20 fewer roses than daisies. The total order came to \$589.50. How many of each type of flower was ordered?

3.)	The Arcadium arcade in Lynchburg, Tennessee uses three different colored tokens for their game machines. For \$20 you can purchase any of the following mixtures of tokens: 14 gold, 20 silver, and 24 bronze; OR, 20 gold, 15 silver, and 19 bronze; OR, 30 gold, 5 silver, and 13 bronze. What is the monetary value of each token?
4.)	Last Tuesday, Regal Cinemas sold a total of 8500 movie tickets. Proceeds totaled \$64,600. Tickets can be bought in one of three ways: a matinee admission costs \$5, student admission is \$6 all day, and regular admission is \$8.50. How many of each type of ticket was sold if twice as many student tickets were sold as matinee tickets?