

Name: _____

Period: _____

Solving systems of equations word problems worksheet

For all problems, define variables, write the system of equations and solve for all variables. The directions are from TAKS so do all three (variables, equations and solve) no matter what is asked in the problem.

1. A large pizza at Palanzio's Pizzeria costs \$6.80 plus \$0.90 for each topping. The cost of a large cheese pizza at Guido's Pizza is \$7.30 plus \$0.65 for each topping. How many toppings need to be added to a large cheese pizza from Palanzio's Pizzeria and Guido's Pizza in order for the pizzas to cost the same, not including tax?
2. Ms. Kitts works at a music store. Last week she sold 6 more than 3 times the number of CDs that she sold this week. Ms. Kitts sold a total of 110 CDs over the 2 weeks. Which system of equations can be used to find l , the number of CDs she sold last week, and t , the number of CDs she sold this week?
3. The length of a rectangle is equal to triple the width. Which system of equations can be used to find the dimensions of the rectangle if the perimeter is 86 centimeters?
4. At a restaurant the cost for a breakfast taco and a small glass of milk is \$2.10. The cost for 2 tacos and 3 small glasses of milk is \$5.15. Which pair of equations can be used to determine t , the cost of a taco, and m , the cost of a small glass of milk?
5. The Frosty Ice-Cream Shop sells sundaes for \$2 and banana splits for \$3. On a hot summer day, the shop sold 8 more sundaes than banana splits and made \$156.