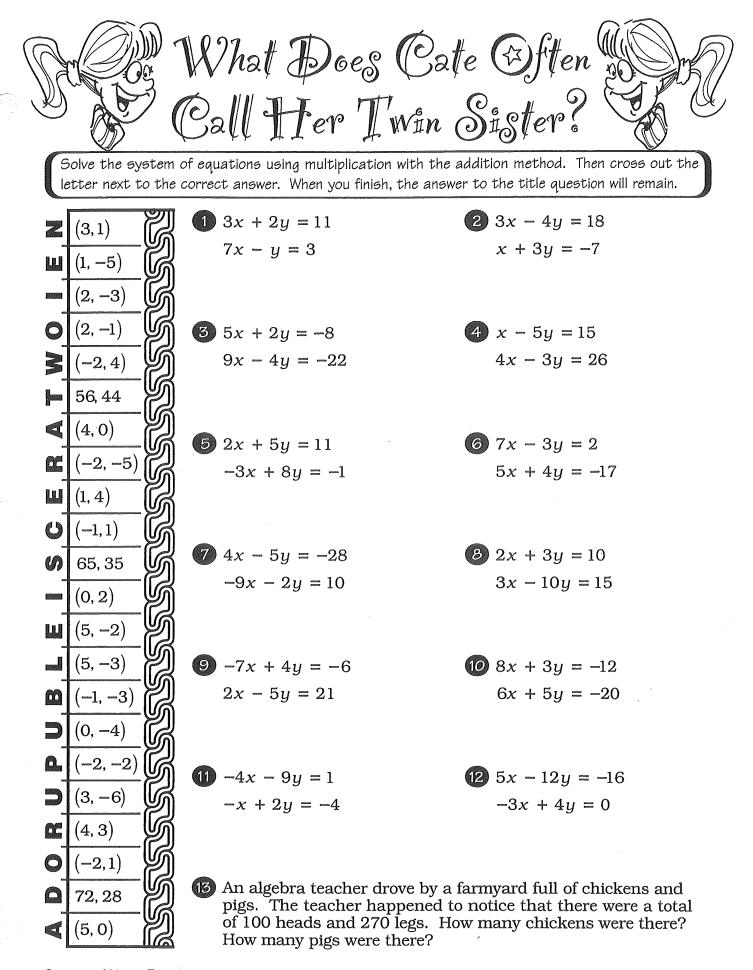
Date

Write the system of equations needed to solve the following problems and solve.

Example:	
If 8 pens and 7 pencils cost \$3.37 while 5 pens and 11 pencils cost \$3.10, how much does each pen and pencil cost?	
Let:	$x = \cot 1 \text{ pen}$ $y = \cot 1 \text{ pencil}$
The two equations will be:	8x + 7y = 337 and $5x + 11y = 310$

- 1. The sum of two numbers is -11. Twice the first number minus the second number is 32. Find the numbers.
- 2. A collection of nickels and dimes is worth \$3.30. There are 42 coins in all. How many of each kind of coin are there?
- 3. One night a theater sold 548 movie tickets. An adult's ticket cost \$6.50, and a child's ticket cost \$3.50. In all, \$2881 was taken in. How many of each kind of ticket were sold?
- 4. The perimeter of a rectangular field is 110 feet. The length is 7 feet more than twice the width. Find the dimensions of the field.
- 5. A second run movie theater charges \$4 for an adult ticket and \$2 for a child's ticket. One night, 380 tickets were sold for a total of \$1320. How many children attended the movie that night?
- 6. The state fair is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. High School A rented and filled 8 vans and 8 buses with 240 students. High School B rented and filled 4 vans and 1 bus with 54 students. Every van had the same number of students in it as did every bus. Find the number of students in each van and each bus.
- 7. An orange has 20 fewer calories than a banana. If 7 bananas have the same number of calories as 9 oranges, how many calories are there in a banana?
- 8. Alexis bought pizza and soda for the ski club meeting. For one meeting she bought 4 pizzas and 10 sodas for \$63. The next meeting she bought 3 pizzas and 8 sodas for \$48. What is the cost of one pizza?



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