

Aim- Problem solving with Systems

Do now-Review

Find the slope and a point that the line of each equation goes through.

1. $Y = 3(x + 1) - 5$

2. $Y = 2x + 8$

3. $Y = 4(x - 1) + 3$

Problem Solving

Explain how to solve each problem, even if the numbers were changed.

1. I'm thinking of two numbers. Their sum is 35, and their difference is 13. What are the numbers?
 2. Two numbers have a sum of 85 and a difference of 31. What are the two numbers?
 3. I'm thinking of two numbers. Their sum is 111, and their difference is 55. What are the numbers?
 4. I'm thinking of two numbers. The larger number is double the smaller one. Their sum is 96. What are the numbers?
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5. At the local Farmer's Market, you bought 7 apples and 4 peaches for \$4.80. Your friends bought 5 apples and 2 peaches for \$3.00. When you got home, your sister asked how much each fruit cost. You don't remember, but you can use mathematics to figure it out.
 6. Asa saves dimes and quarters so that he will have exact change for the bus. He dumps out the container that he has been using to collecting his coins and finds that he has 47 coins that are worth \$9.50. How many of each coin does he have?
 7. Last night was a sellout for the school play. However, the students running the box office lost track of the number of adult tickets and children's tickets that were sold. Here's what you know: The theater seats 200 people. Adult tickets were priced at \$8, and children's tickets were \$5. At the end of the night, the box office had collected \$1360 in ticket sales. How many children and how many adults saw the show last night?