



N: _____
Algebra 2 // 3.2 Practice // **Practice 2**

D: _____ P: 1 2 3 4 5 6
Mission Hills Math 2013

Directions: Use the LESA method! **Label** your variables and write the **2 equations** for each of the following problems. Then **solve** and **answer** the question. Show your work!

1. The sum of two numbers is 55. The larger number is one more than twice the smaller number. What are the numbers?
2. Cynthia found 35 coins under her sofa cushion worth \$2.65. Out of the 35 coins, some were nickels and some were dimes. How many nickels and how many dimes did she find?
3. Jason invested \$13,000 in two different accounts. Account A paid a 7% interest rate. Account B paid a 6% interest rate. The interest earned in one year was \$830. How much money was initially invested in each amount?
4. At a restaurant buffet, adults cost \$9 each and children cost \$6 each. In one day, the manager counted 323 people who ate at this buffet. He also knew that these people had paid a total of \$2577. How many adults and how many children ate at the buffet that day?
5. The perimeter of a rectangle is 28 inches. The width is 4 inches less than the length. Find the length and width of this rectangle.
6. The perimeter of a rectangle is 68 feet. The length is 4 feet more than twice the width. Find the length and width of this rectangle.
7. An alloy that is 15% gold is melted with an alloy that is 40% gold. How many ounces of each alloy must be melted together to obtain 400 ounces that is 20% gold?
8. A 35% sugar solution is mixed with an 80% sugar solution. How many gallons of each solution need to be mixed together to end up with 900 gallons of a 45% sugar solution?