

NJCU Math 205 Summer 2010 Homework #7

1. Tierra and Joey shared some stamps in the ratio 7:5. Tierra gave Joey 12 stamps. If each of them had the same number of stamps in the end, how many stamps did Tierra have in the beginning?
2. The ratio of Victoria's weight to Kazuki's weight was 4:5. If Victoria's weight increased BY 5 lb. and Kazuki's weight decreased by 1 lb., Victoria would have the same weight as Kasuki. What was Victoria's original weight?
3. Last year, the ratio of the number of boys to the number of girls in the computer club was was 1:2. This year, 70 new members joined the computer club. There are now 4 times as many boys and 3 times as many girls as last year. How many members were in the computer club last year?
4. There were 85 erasers in Box A and 15 erasers in Box B. When an equal number of erasers was added to each box, the number of erasers in Box A was 3 times as many as that in Box B. How many erasers were added to each box.
5. A square plot of land has an area of 196 square meters, while a rectangular plot of land with a length of 12 m has an area of 96 square meters. What is the ratio of the length of the square plot of land to the width of the rectangular plot of land?
6. Andrew had \$93. With this money, he could buy 3 CDs and 4 books. However, he bought only 2 CDs and 3 books and had \$27 left. What was the cost of each CD?
7. The ratio of Carlos's money to Ava's money to Zach's money is 4:5:9. If Zach has \$168 more than Ava,
 - a. How much money does Ava have?
 - b. How much money will Zack have left if he spends $\frac{1}{3}$ of it?
8. For every watch that Sarah sells, she earns \$4. She gets an additional bonus of \$50 for every 25 watches she sells. Last month, Sarah received a total of \$506. How many watches did she sell last month?
9. Jamila and Akiko had the same amount of money to spend. After Jamila spent \$33 and Akiko spent \$42, Jamila had 4 times as much money left as Akiko. How much money did each of them have in the beginning?
10. Lily and Mackenzie collected some stamps. If Lily gave 4 stamps to Mackenzie, and Mackenzie would have twice as many stamps as Lily. If Mackenzie gave 4 stamps to Lily, they would have the same number of stamps. How many stamps did each girl have?