Skills Check (21-23) Date_____ HW #____

Skill #21--Write the System of Equations for the given scenario--(Don't Solve)

1) The water park 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. The senior class at High School A rented and filled 13 vans and 2 buses with 190 students. High School B rented and filled 5 vans and 8 buses with 478 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?

2) Abhasra and Jenny are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Abhasra sold 2 rolls of plain wrapping paper and 14 rolls of shiny wrapping paper for a total of $294. Jenny sold 7 rolls of plain wrapping paper and 7 rolls of shiny wrapping paper for a total of $189. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?

3) Norachai and Eduardo are selling cheesecakes for a school fundraiser. Customers can buy New York style cheesecakes and strawberry cheesecakes. Norachai sold 4 New York style cheesecakes and 2 strawberry cheesecakes for a total of $48. Eduardo sold 14 New York style cheesecakes and 14 strawberry cheesecakes for a total of $224. Find the cost each of one New York style cheesecake and one strawberry cheesecake.

Skill #22--Solve the System of Equations.

4) $y = x + 4$
$y = -5x - 2$

5) $y = -7x - 4$
$y = -x + 2$

6) $y = 4x - 1$
$y = x + 2$

Skill #23--Write a system of equations and solve.

7) Totsakan's school is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 7 senior citizen tickets and 6 child tickets for a total of $94. The school took in $148 on the second day by selling 14 senior citizen tickets and 2 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.

8) Eduardo and Lea each improved their yards by planting hostas and geraniums. They bought their supplies from the same store. Eduardo spent $192 on 7 hostas and 12 geraniums. Lea spent $231 on 14 hostas and 7 geraniums. What is the cost of one hosta and the cost of one geranium?

9) The senior classes at High School A and High School B planned separate trips to the water park. The senior class at High School A rented and filled 1 van and 7 buses with 423 students. High School B rented and filled 7 vans and 13 buses with 873 students. Every van had the same number of students in it as did the buses. How many students can a van carry? How many students can a bus carry?