# SEMESTER REVIEW: System of Equations Word Problems

Name:_____          Period:_____

**Directions:** Answer the questions to each question. **Show all work.**

1. Debbie owns a local flower shop. Last year during Valentine's Day, they sold 32 large rose bouquets and 24 small rose bouquets. They earned $1,720. This year they plan on selling 45 large bouquets and 30 small bouquets and making $2,325.

   a. Write a system of equations that represent this situation. **(Identify the variables.)**

   b. What is the price of each bouquet? **Show all work.**

   c. **How much more money** would Debbie get if they charge $5 more for the small rose bouquet? **Show all work.**

   d. **How much more money** would Debbie get if they charge $5 more for the large rose bouquet? **Show all work.**

2. At a wrestling match, a school charged $10 for adults and $5 for children 12 and under. There were 350 people that watched the event. The school earned $2,680.

    a.    Write a system of equations that represent this situation. **(Identify the variables.)**

    b.    How many of adults and children attended the wrestling match? **Show all work.**

    c.    **How much more money** would the school get if they charge the $10 for both adults and children 12 and under? **Show all work.**

    d.    **How much more money** would the school get if they charge the $15 for adults? **Show all work.**

3. At the Happy Grillmore restaurant last night, they had 2 dinner specials: smoked salmon for $18.99 and the ribeye steak for $21.99. They sold 24 specials, making $497.76.

   a. Write a system of equations that represent this situation. **(Identify the variables.)**

   b. How many of each special did they sell? **Show all work.**

   c. **How much more money** would the restaurant get if they charge the $21.99 for both specials? **Show all work.**

   d. **How much more money** would the restaurant get if they charge the $24.99 for the ribeye steak dinner? **Show all work.**

4. At the Brewed Awaking, large lattes cost $4.50 and small lattes cost $3.00. Yesterday, they sold 123 lattes and made $483.

a. Write a system of equations that represent this situation. **(Identify the variables.)**

b. How many of each latte did they sell? **Show all work.**

c. **How much more money** would the restaurant get if they charge $5 for a large latte? **Show all work.**

d. **How much more money** would the restaurant get if they charge the $3.50 for the small latte? **Show all work.**