Find the area of the triangle given 3 vertices.

1. (-2, 1) (4, 7) (9, 8) 2. (-2, 3) (4, 7) (0, -1)

Applications – Write the system and solve.

3.) Nicole and Lindsey are selling tickets for admission to the show choir and collect a total of $104. Twenty-one tickets were sold. Admission prices are $6 for adults and $4 for children. How many adult tickets and how many children tickets did they sell?

4.) Ashley’s family goes to a restaurant for dinner. There are 6 people in her family. Some order the chicken dinner for $14.80 and some order the steak dinner for $17. If the total bill was $91, how many people ordered each type of dinner?

5.) Michael bought the meat for last Saturday’s tailgate. A package of hot dogs cost $1.60 and a package of hamburger cost $5. He bought a total of 8 packages of meat and spent $23. How many packages of hamburger meat did he buy?

6.) Brendan orders 3 pizzas and 2 orders of breadsticks for a total of $29.50. Sarah orders 2 pizzas and 3 orders of breadsticks for a total of $23. How much does a pizza cost?

7.) During spring break The Beach Hotel in Cancun is offering two weekend specials. One includes a 2-night stay with 3 meals and cost $195. The other includes a 3-night stay with 5 meals and cost $300. What is the cost of a single meal?

8.) Justin and Adam went to a Mexican restaurant last week with some of their friends. Justin ordered 2 tacos and 2 enchiladas. Adam ordered 3 tacos and 1 enchilada. Justin’s bill was $4.80. Adam’s bill was $4.00. What was the price of an enchilada?

9.) For a community bake sale, Lauren purchases 12 pounds of sugar and 15 pounds of flour. Her total cost was $9.30. The next day, she purchased 4 pounds of sugar and 10 pounds of flour. Lauren’s total cost the second day was $4.60. Find the cost of a pound of sugar and a pound of flour.