Riddle
Algebra 2
Word Problems Homework

Solve each problem using a system of equations. Be sure to tell me what the variables stand for, write the equations, show work when solving the system, write the answer in a complete sentence.

1. Sam Jones is the kicker for the football team. In one game, Sam scored a total of 13 points by making 7 kicks. How many of the kicks were field goals (3 points each) and how many were extra points ( 1 point each)?
2. The drama club sells hot chocolate and coffee at the football games to make money. At one game, they sold $\$ 200$ worth of hot drinks. If the hot chocolate sells for 75 cents and coffee sells for 50 cents, and they used 295 cups that night, how many of each type of hot drink did they sell?
3. Twenty coins have a total value of $\$ 3.40$. Some are quarters and some are nickels. How many of each is there?
4. A person renting a function hall for a party pays a fixed charge and a certain amount per guest. If a party for 60 guests costs $\$ 100$ and a party for 100 guests costs $\$ 150$, what are the fixed charge and the charge per guest?
5. The sum of three numbers us 16 . The second number is twice the first. The sum of the first and third is 4 . Find the numbers.
