1. Tickets for a concert cost $7.50 for students and $15.00 for adults. 150 tickets are sold, and $1612.50 is collected.

a. Write a system of equations to represent this situation. Be sure to define your variables.

b. Create a table to solve the system of equations and then check the solution.

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c. How many student tickets were sold? How many adult tickets?

2. The student council is planning to purchase balloons to decorate for a school dance. They want to buy 100 maroon and gold balloons. The maroon balloons cost $0.75 each and the gold balloons cost $1.25 each. The student council has budgeted $90 for balloons, but they don’t know how many of each color to buy.

a. Write a system of equations to represent this situation.

b. Create a table to solve the system of equations and then check the solution.

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c. How many maroon balloons should the student council buy? How many gold balloons?

3. There are goats and chickens in the barn. The goats each have 4 legs and the chickens each have 2 legs. There are 24 animals in the barn, and they have a total of 76 legs. How many goats and how many chickens are in the barn?

a. Write a system of equations to represent this situation. Be sure to define your variables.

b. Create a table to solve the system of equations and then check the solution.

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c. How many chickens are in the barn? How many goats?