Linear Equations as a Matrix Equation - Guided Lesson

Complete the following problems:

1) Write a system of equations to describe the situation below, solve using an augmented matrix, and fill in the blanks.

In the summer, Alvin went to a coffee shop with his friends. He placed two orders at the coffee shop. The first order was for 5 cold coffees and 6 cold drinks, at a cost of \$50. The second order was 1 cold drink at a cost of \$5. How much does each type of drink cost?



One cold coffee costs \$ ______, and one cold drink costs \$ _____.

2) In spring, Brock went shopping with his family. He puts in two orders at the clothing shop. The first order was for 4 jackets and 7 pullovers, at a cost of \$430. The second order was 1 jacket at a cost of \$ 20. How much do the orders cost?

One jacket costs \$ _____, and the pullover costs \$ _____.

3) Solve using augmented matrices.

$$x + y = -2$$

$$x = -1$$