$\qquad$

## System of Equations Word Problems (Algebraically)

Example \#1: A Carpenter and a Painter are doing a job on a house. The Carpenter charges $\$ 25$ for just coming into the house and $\$ 15$ per hour of labor. The Painter charges $\$ 15$ for just for coming into the house and $\$ 20$ per hour of labor. Last week, the Carpenter and Painter went to a job site together, spent the same amount of time working, and earned the same amount of money. How many hours did they work to earn the same amount and how much did they earn?


Example \#2: A jar contains n nickels and d dimes. There is a total of 200 coins in the jar. The value of the coins is $\$ 14.00$. How many nickels and how many dimes are in the jar?

## Try It!

1. Adult tickets to Space City amusement park cost $x$ dollars. Children's tickets cost y dollars. The Rubenstein family bought 3 adult tickets and 1 child ticket for $\$ 163$. The Sheehan family bought 2 adult tickets and 3 child tickets for $\$ 174$. How much did each ticket cost?
2. Autumn has $\$ 0.64$ worth of pennies and nickels. She has a total of 20 pennies and nickels altogether. Determine the number of pennies and the number of nickels that Autumn has.
