

Name:

Date:

*Understands how to solve systems of equations word problems that model real-life situations.*

## **Worksheet L**

*Directions: Write the system of linear equations that models each situation.*

1) A boutique in Fairview specializes in leather goods for men. Last month, the company sold 69 wallets and 89 belts, for a total of \$10,032. This month, they sold 69 wallets and 36 belts, for a total of \$6,852. How much does the boutique charge for each item?

2) An administrative assistant is making some copies. She made 30 one-sided copies and 30 two-sided copies for the V.P. of Marketing, which took a total of 180 seconds. Next, she made 24 one-sided copies and 18 two-sided copies for the Director of Sales, which took 114 seconds. How long does it take to make each type of copy?

3) An employee at a construction company is ordering interior doors for some new houses that are being built. There are 1 two-story house on the west side of the street, which require a total of 16 doors. On the east side, there are 7 one-story houses and 1 two-story house, which require a total of 58 doors. Assuming that the floor plans for the one-story houses are identical and so are the two-story houses, how many doors does each type of house have?

4) Clara and Erin went to an arcade where the machines took tokens. Clara played 1 game of pinball, using a total of 4 tokens. At the same time, Erin played 10 games of skee ball and 8 games of pinball, using up 42 tokens. How many tokens does each game require?

5) Rina just became a personal trainer and is finalizing her pricing plans. One plan is to charge \$33 for the initial consultation and then \$35 per session. Another plan is to charge \$36 for the consultation and \$34 per session. Rina realizes that the two plans have the same cost for a certain number of sessions. What is that cost? How many sessions is that?

6) Gymnasts training for an upcoming competition are practicing their routines for balance beam and floor exercise. During morning practice, Leslie practiced her beam routine 3 times and her floor routine 7 times, which took a total of 30 minutes. During afternoon practice, she ran through her beam routine 3 times and her floor routine 10 times, which took a total of 39 minutes. How long is each routine?

7) Sean is an airline attendant. Last week, he worked on flights on 4 small jets and 1 large jet, which could seat a total of 237 passengers. The week before, he was assigned to flights on 5 small jets and 1 large jet, which could seat a total of 277 passengers. How many seats were on each type of flight?

8) Gina is working furiously to knit scarves and beanies for a craft fair next weekend. Yesterday she completed 3 scarves and 1 beanie, using a total of 17 meters of yarn. The day before, she used 7 meters to knit 1 scarf and 1 beanie. Assuming Gina is using the same pattern and type of yarn for each scarf and beanie, how much yarn does each project require?