

6-6 Systems of Equations in Context

Name _____

Per. ____

Write a system of equations for each situation. Then solve your system to answer the given question. Be sure to define your variables and answer in complete sentences!

1. Your aunt sews both large and small quilts. A large quilt requires 8 yards of fabric and a small quilt requires 3 yards of fabric. How many of each size quilt did she make if she used a total of 90 yards of fabric to make 15 quilts?

2. Your sister is in France for a semester and has the choice of two Internet cafes. Café de Flore charges \$12 plus \$2 an hour. Café Le Paris charges \$27 plus \$0.50 an hour. How many hours would she need to use the Internet per month for the services to be the same price?

She estimates that she will spend between 15 and 20 hours per month on the Internet. Which Internet café should she choose? Explain your answer in a complete sentence.

3. A baseball camp is buying shirts and hats for campers. One order for 6 shirts and 5 hats totaled \$99.50. The next order cost \$227 for 16 shirts and 10 hats. How much did each shirt and each hat cost?

4. The Art Club ordered 6 tubes of acrylic paint and 8 tubes of oil paint for a total of \$245. They needed more colors and later ordered 4 tubes of acrylic paint and 6 tubes of oil paint for \$178. How much did a tube of each type of paint cost?