NAME ––––––––––––––––––––––––––––––– DATE ––––––––––

Application Lesson Opener

For use with pages 418–424

Use the following information for Questions 1 and 2.

You sold two different types of wrapping paper for your band fund-raiser. One type sold for $6 a roll and the other for $8 a roll. You collected a total of $92 for the 14 rolls you sold.

1. Let x represent the number of $6 rolls you sold and y the number of $8 rolls you sold. Which system of equations can be used to model this problem? Why?

A. $x + y = 92$
$6x + 8y = 14$

B. $x + y = 14$
$6x + 8y = 92$

C. $x - y = 14$
$6x - 8y = 92$

D. $x - y = 92$
$6x - 8y = 92$

2. What method would you use to solve the system of equations you chose in Question 1? Explain your answer.

Use the following information for Questions 3 and 4.

You paid $31 to ship 8 packages. The shipping for each package in one group was $3.50. The shipping for each package in the other group was $5.

3. Let x represent the number of $3.50 packages and y represent the number of $5 packages. Which system of equations can be used to model this problem? Why?

A. $x + y = 3.50$
$x + y = 5$

B. $x + y = 31$
$3.5x + 5y = 8$

C. $x + y = 31$
$x - y = 8$

D. $x + y = 8$
$3.5x + 5y = 31$

4. What method would you use to solve the system of equations you chose in Question 3? Explain your answer.