

6-5 Practice

Applying Systems of Linear Equations

Determine the best method to solve each system of equations. Then solve the system.

1. $1.5x - 1.9y = -29$
 $x - 0.9y = 4.5$

2. $1.2x - 0.8y = -6$
 $4.8x + 2.4y = 60$

3. $18x - 16y = -312$
 $78x - 16y = 408$

4. $14x + 7y = 217$
 $14x + 3y = 189$

5. $x = 3.6y + 0.7$
 $2x + 0.2y = 38.4$

6. $5.3x - 4y = 43.5$
 $x + 7y = 78$

7. **BOOKS** A library contains 2000 books. There are 3 times as many non-fiction books as fiction books. Write and solve a system of equations to determine the number of nonfiction and fiction books.

8. **SCHOOL CLUBS** The chess club has 16 members and gains a new member every month. The film club has 4 members and gains 4 new members every month. Write and solve a system of equations to find when the number of members in both clubs will be equal.

9. Tia and Ken each sold snack bars and magazine subscriptions for a school fund-raiser, as shown in the table. Tia earned \$132 and Ken earned \$190.

Item	Number Sold	
	Tia	Ken
snack bars	16	20
magazine subscriptions	4	6

a. Define variable and formulate a system of linear equation from this situation.

b. What was the price per snack bar? Determine the reasonableness of your solution.