

**2.4****Practice A**

In Exercises 1 and 2, solve the system using the elimination method.

1.  $x - 6y + 2z = 5$

$2x - 3y + z = 4$

$3x + 4y - z = -2$

2.  $x + y - z = -2$

$2x - y + z = 8$

$-x + 2y + 2z = 10$

3. Describe and correct the error in the first step of solving the system of linear equations.

$5x + 3y - z = 15$

$-x + 2y + 3z = 10$

$3x - 4y + 3z = 8$

X	$5x + 3y - z = 15$
	$-5x + 10y + 15z = 10$
	$13y + 14z = 25$

In Exercises 4 and 5, solve the system using the elimination method.

4.  $x + 4y - 3z = 1$

$3x + 12y - 9z = 8$

$2x + 4y - 4z = -12$

5.  $x + y - z = 2$

$x - y - z = 2$

$3x + y - 3z = 6$

6. Three bouquets of flowers are ordered at a florist. Three roses, 2 carnations, and 1 tulip cost \$14, 6 roses, 2 carnations, and 6 tulips cost \$38, and 1 rose, 12 carnations, and 1 tulip cost \$18. How much does each item cost?

In Exercises 7 and 8, solve the system of linear equations using the substitution method.

7.  $y = -3$

$2x + y = 5$

$x - 2y + z = 6$

8.  $x - y = 5$

$-x + 4y + 2z = 3$

$-x + 3y - 5z = -6$

9. A triangle has a perimeter of 90 centimeters.

a. Write and use a linear system to determine the lengths of sides  $\ell$ ,  $m$ , and  $n$ .

b. Is the triangle a right triangle? Explain.

