Algebra 2 Chapter 4 Test Review

Multiple Choice
Identify the letter of the choice that best completes the statement or answers the question.

____ 1. Suppose A and B are 5×1 matrices. Which of the following are the dimensions of the matrix A + B?
a. 6×6 b. 6×1 c. 5×1 d. 5×5

____ 2. A matrix contains 60 elements. Which of the following cannot equal the number of rows of the matrix?
a. 30 b. 60 c. 10 d. 18

Solve the system.

____ 3. $\begin{cases} -5x - 5y = -5 \\ -5x + 3y + z = -36 \\ -3x + 2z = -13 \end{cases}$
a. (5, –4, 1) c. (5, 4, –1)
b. (–5, –36, –13) d. (–5, –4, 1)

Short Answer

Solve the system.

4. $\begin{cases} 4x + 3y = -12 \\ -3y - 5z = -3 \\ -4x + 5z = 15 \end{cases}$

5. $\begin{cases} 7x + 2y = 11 \\ -17x - 5y = 1 \end{cases}$

6. $\begin{cases} -3x + 4y + 5z = 13 \\ 5x + 5y - 2z = 26 \\ x + 5y - 4z = 10 \end{cases}$

Find the values of the variables.

7. $\begin{bmatrix} -2 + t & 0 \\ 8 & -1 \end{bmatrix} = \begin{bmatrix} -5 & 0 \\ 8 & 1y - 2 \end{bmatrix}$

8. $\begin{bmatrix} 4 & 3 \\ -7 & -4 \end{bmatrix} = \begin{bmatrix} 4 & x \\ y & -4 \end{bmatrix}$