

Precalculus
9.1 Odd Answers

1.
$$\left[\begin{array}{cc|c} 1 & -3 & -2 \\ 0 & 1 & 9 \end{array} \right]$$

3. System:
$$\begin{cases} x = 5 \\ y = -1 \end{cases}$$

Consistent

One solution

Solution: $(5, -1)$

5. System:
$$\begin{cases} x = 1 \\ y + 3z = 2 \\ 0 = 0 \end{cases}$$

Consistent

Infinitely many solutions

Solution set: $\{(x, y, z) | x = 1, y = -3z + 2, z \in \mathbb{R}\}$

7. System:
$$\begin{cases} x + w = -2 \\ y + 2w = 2 \\ z - w = 0 \\ 0 = 1 \end{cases}$$

Inconsistent

No solution

Solution set: \emptyset

9. $(6, 2)$

11. $\{(x, y) | x = -2y + 4, y \in \mathbb{R}\}$

13. $(8, 2, 0)$

15. Inconsistent, \emptyset

17. $(2, 1, 0, 1)$