

Answer Key

Practice C

1. $\begin{bmatrix} 1 & 4 \\ 2 & -3 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 3 \\ 1 \end{bmatrix}$

2. $\begin{bmatrix} 2 & 1 & -1 \\ 3 & 1 & -4 \\ 1 & 1 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 4 \\ 2 \\ 6 \end{bmatrix}$

3. $\begin{bmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 & 3 & -1 \\ 1 & -1 & 1 & -2 \\ 1 & 2 & 4 & 1 \end{bmatrix} \begin{bmatrix} w \\ x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 4 \\ 8 \\ 3 \\ 6 \end{bmatrix}$

4. (2, 1) 5. (-3, -6) 6. (25, -50)

7. (6, 12, -6) 8. (10, -3, 2)

9. (3, -6, 12) 10. (-10, 5, 0)

11. (6, 2, -1, 3) 12. (150, 300, -300, 600)

13. 3 lb ham, 3 lb turkey, 2 lb roast beef, 4 lb cheese

14. $f + s + j + s = 690$;

$$f + s - j - s = -10$$

$$0.05f + 0.05s + 0.1j + 0.16sn = 61$$

$$0.1f + 0.15s + 0.12j + 0.08sn = 78$$

180 freshmen, 160 sophomores, 200 juniors,

150 seniors