

# Answer Key

## Chapter 4 Lesson 4.2

### Practice C

1.  $\begin{bmatrix} 4 & 8 \\ 3 & 11 \end{bmatrix}$  2.  $\begin{bmatrix} -12 & 8 \\ 0 & 3 \\ 3 & -5 \end{bmatrix}$

3.  $\begin{bmatrix} -11 & 16 \\ -24 & 16 \\ -9 & -20 \end{bmatrix}$  4.  $\begin{bmatrix} -9 & 16 & 2 \\ -3 & 12 & -6 \\ 2 & 2 & -6 \end{bmatrix}$

5. Not defined. The number of columns of the first matrix does not equal the number of rows of the second matrix.

6.  $\begin{bmatrix} -16 \\ -2 \\ 1 \\ 7 \end{bmatrix}$  7.  $\begin{bmatrix} -45 & 1 & -32 \\ 114 & -26 & 40 \end{bmatrix}$  8.  $\begin{bmatrix} -35 \\ 17 \end{bmatrix}$

9.  $\begin{bmatrix} -4 & 12 & 40 \\ -96 & -12 & -220 \\ -68 & -16 & -136 \end{bmatrix}$  10.  $\begin{bmatrix} -15 & \frac{93}{2} \\ 20 & -\frac{5}{2} \end{bmatrix}$

11.  $x = -2, y = -3$  12.  $x = 5, y = 1$

13.  $\begin{bmatrix} 0 & 2 & 5 \\ -1 & -3 & -1 \end{bmatrix}$ ; reflection across  $x$ -axis

14. Rebecca: 380; Craig: 370

REBECCA

$$\begin{aligned} &.80(350) + .25(400) \\ &280 + 100 \\ &380 \end{aligned}$$

CRAIG

$$\begin{aligned} &.75(400) + .20(350) \\ &300 + 70 \\ &370 \end{aligned}$$