

1. 1.3
2. 1.8941
3. 15
4. $\sqrt{12.5} \approx 3.5355$
5. .9544
6. .2578
7. .0985
8. .7967
9. .3208
10. 1.2
11. [a] 65 [b] 106
12. $\begin{bmatrix} -6 & -4 & 7 \\ 3 & -4 & -3 \end{bmatrix}$
13. $\begin{bmatrix} 3 & -2 & 5 \\ 3 & 13 & 6 \end{bmatrix}$
14. AC, BC, CA and CB are defined.
15. $\begin{bmatrix} 16 & -12 \\ 10 & 13 \end{bmatrix}$
16. 1
17. $\begin{bmatrix} 22 & 6 \\ 9 & 7 \end{bmatrix}$
18. $x = -\frac{1}{2}, y = 4$
19. no solution (inconsistent system)
20. $x = -2, y = -1, z = 4$
21. $x = \frac{1}{2}, y = 3, z = -1$
22. Operate the Green Bay plant for 60 hours and the Sheboygan plant for 28.5 hours