Solve each system of equations by putting the information in a Matrix in your calculator. State the value for each variable, not just the matrix.

$$10. \ 2x + y = 4$$
$$3x + 2y = 1$$

11. 
$$6x + 3y = 6$$
  
 $8x + 5y = 12$ 

12. 
$$x - 3y = 16$$
  
 $4x - y = 9$ 

13. 
$$2m - n = -1$$
  
 $3m + 2n = 30$ 

$$14. \ \frac{1}{2}x + 3y = 11$$

$$8x - 5y = 17$$

$$15. x - 3y = 9$$
$$x + 2y = -1$$

$$\begin{array}{ccc}
-16. & 4x - 3y = -6 \\
-x - 2y = 7
\end{array}$$

17. 
$$2g + h = 6$$
  
 $3g - 2h = 16$ 

18. 
$$2m + n = 6$$
  
 $5m + 6n = 1$ 

Last year the volleyball team paid \$5 per pair for socks and \$17 per pair for shorts on a total purchase of \$315. This year they spent \$342 to buy the same number of pairs of socks and shorts because the socks now cost \$6 a pair and the shorts cost \$18.

- 19. Write a system of two equations that represents the number of pairs of socks and shorts bought each year.
- 20. How many pairs of socks and shorts did the team buy each year?