Assignment 2

1. Find the solution of the equation 16x + 4y = 32 for y in terms of x.

2. Find the equation of the line that passes through the points (3, 4) and (5, 8).

3. Find the area of a triangle with vertices at (0, 0), (4, 0), and (0, 3).

4. If 2x + 3y = 12 and 4x + 6y = 24, then find the value of x and y.

5. Solve the system of equations:
   
   \[ \begin{align*} 
   2x + 3y &= 11 \\
   4x + 6y &= 22 
   \end{align*} \]

6. Solve the equation 5x - 2y = 10 for y in terms of x.

7. Find the slope of the line passing through the points (1, 2) and (3, 4).

8. Find the equation of the line that is perpendicular to the line 2x + 3y = 6 and passes through the point (4, 5).

9. Solve the following system of linear equations by substitution:
   
   \[ \begin{align*} 
   2x + 3y &= 11 \\
   4x + 6y &= 22 
   \end{align*} \]

10. Find the equation of the line that is parallel to the line 3x - 2y = 5 and passes through the point (1, 2).

11. Solve the system of equations:
   
   \[ \begin{align*} 
   2x + 3y &= 11 \\
   4x + 6y &= 22 
   \end{align*} \]

12. Find the area of a triangle with vertices at (0, 0), (4, 0), and (0, 3).

13. Solve the equation 5x - 2y = 10 for y in terms of x.

14. Find the slope of the line passing through the points (1, 2) and (3, 4).

15. Find the equation of the line that is perpendicular to the line 2x + 3y = 6 and passes through the point (4, 5).

16. Solve the following system of linear equations by substitution:
   
   \[ \begin{align*} 
   2x + 3y &= 11 \\
   4x + 6y &= 22 
   \end{align*} \]