10. Solve the following system of equations graphically:

$$x + 3y = 6; \qquad 2x - 3y = 12$$

and hence find the value of $a$, if $4x + 3y = a$. **[CBSE 2008]**

11. Solve the following pair of linear equations graphically:

$$2x + y = 10; \qquad 4x - y = 8.$$

Does the point $(1, -4)$ lie on any one of the lines? Write its equation. **[CBSE 2003]**

12. Determine graphically whether the pair of linear equations

$$2x + 3y = 7; \qquad 6x + 9y = 21$$

is consistent (dependent), consistent (independent) or inconsistent.

13. Show graphically that the following system of linear equations is inconsistent.

$$2x - 3y - 2 = 0; \quad 4x - 6y - 10 = 0$$

14. Show graphically that the following pair of linear equations has infinitely many solutions.

$$2x + 3y = 6; \qquad 4x + 6y = 12$$ **[CBSE 2010]**

15. Solve graphically the following system of linear equations. Also find the coordinates of the points where the graph lines meet the $x$-axis.

(i) $3x + y - 12 = 0; \quad x - 3y + 6 = 0$ **[CBSE SP 2006]**

(ii) $x + 2y = 5; \qquad 2x - 3y = -4$ **[CBSE 2005]**

16. Solve graphically each of the following system of linear equations. Also find the coordinates of the points where the graph lines meet the $y$-axis.

(i) $3x + 2y + 4 = 0; \quad 3x - 2y + 8 = 0$ **[CBSE SP 2006]**

(ii) $x + 3y = 6; \qquad 2x - 3y = 12$ **[CBSE 2008]**

17. Solve graphically the following pair of linear equations. Also find the coordinates of the points where the lines intersect the $x$-axis and the $y$-axis.

$$x + y = 7; \qquad 5x + 2y = 20$$

18. Determine graphically the vertices of the triangle, the equations of whose sides are

(i) $2y + x = 0; \qquad 3y = x \quad$ and $\quad x = 6$

(ii) $y = x; \qquad 3y = x \quad$ and $\quad x + y = 8$ **[CBSE 2008]**

19. Solve the following system of equations graphically:

$$4x - 5y + 16 = 0; \quad 2x + y - 6 = 0$$

Determine the vertices of the triangle formed by these lines and the $x$-axis. **[CBSE 2006]**

20. Solve the following system of linear equations graphically:

$$4x - 5y - 20 = 0; \quad 3x + 5y - 15 = 0.$$

Determine the vertices of the triangle formed by the lines, representing the above equations and the $y$-axis. **[CBSE 2004]**