Section 2.3 WS **Name** _____

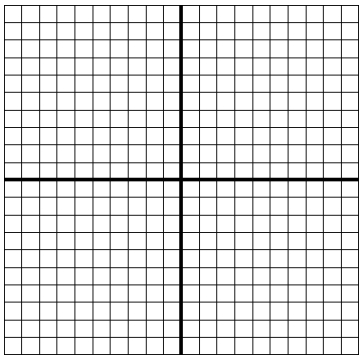
1. The graph of a line with zero slope is _____.
2. The graph of a line whose slope is undefined is _____.

Determine whether the graphs of the two equations are parallel, perpendicular, or neither.

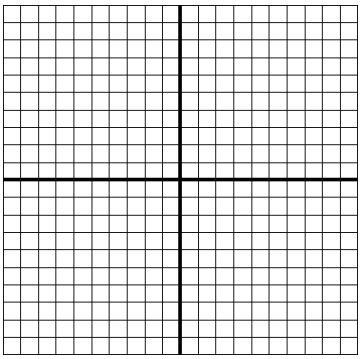
3. $y = 3x - 4$, $y = -3x + 2$
4. $y = -\frac{2}{3}x + 1$, $y = 2 - \frac{2x}{3}$
5. $f(x) = 3x - 1$, $y = -\frac{x}{3} - 1$
6. $y = \frac{4x}{3} + 2$, $y = 2 - \frac{3}{4}x$

Graph the function.

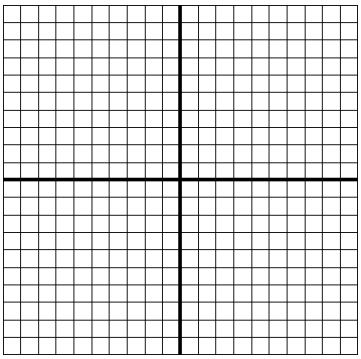
7. $y = 2x - 4$



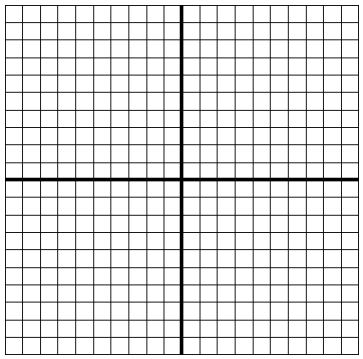
8. $y = -\frac{3}{2}x + 4$



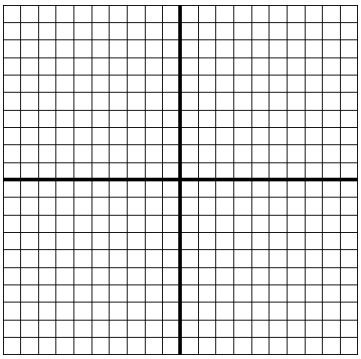
9. $y = 3$



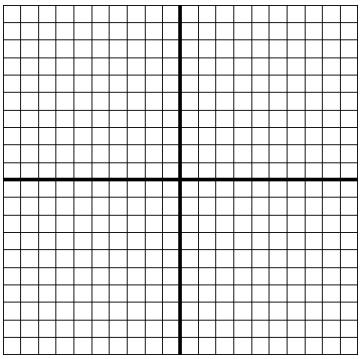
10. $y = x$



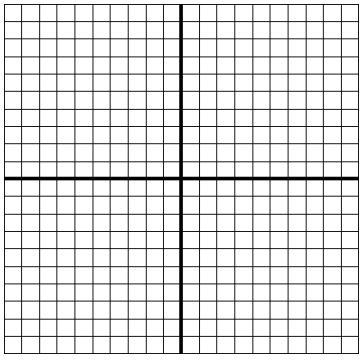
11. $2x - 5y = -15$



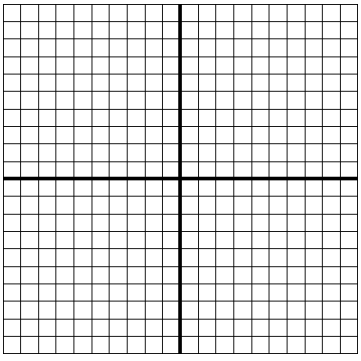
12. $x + 2y = 6$



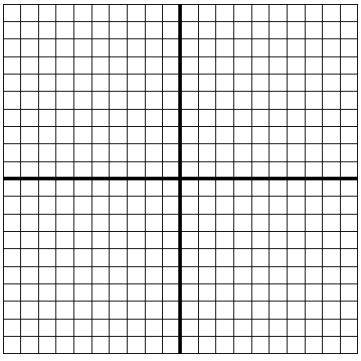
13. $x = -4$



14. $2x + y = 5$



15. $y = -x + 1$



Write the equation of the line in slope-intercept form that satisfies the given conditions.

16. Through $(-3,2)$, slope -4

17. Through $(1,1)$, slope 4

18. Through $(-6,2)$, slope $\frac{2}{3}$

19. Through $(8,-1)$ and $(-4,2)$

20. Through $(-2,1)$ and $(5,1)$

21. Through $(1,-3)$ and $(-1,-9)$

22. The graph is parallel to the graph of $y=\frac{2}{3}x-1$ and passes through the point whose coordinates are $(-3,-1)$.

23. The graph is parallel to the graph of $2x-5y=2$ and passes through the point whose coordinates are $(5,2)$.

24. The graph is perpendicular to the graph of $y=-x+3$ and passes through the point whose coordinates are $(-5,2)$.

25. The graph is perpendicular to the graph of $3x-2y=5$ and passes through the point whose coordinates are $(-3,4)$.