NAME _____ DATE _____ PERIOD _____

4-3 Practice
Parallel and Perpendicular Lines

Write an equation in slope-intercept form for the line that passes through the given point and is parallel to the graph of the given equation.

1. (3, 2), $y = x + 5$

2. (–2, 5), $y = -4x + 2$

3. (4, –6), $y = -\frac{3}{4}x + 1$

4. (5, 4), $y = \frac{2}{5}x - 2$

5. (12, 3), $y = \frac{4}{3}x + 5$

6. (3, 1), $2x + y = 5$

7. (–3, 4), $3y = 2x - 3$

8. (–1, –2), $3x - y = 5$

9. (–8, 2), $5x - 4y = 1$

10. (–1, –4), $9x + 3y = 8$

11. (–5, 6), $4x + 3y = 1$

12. (3, 1), $2x + 5y = 7$

Write an equation in slope-intercept form for the line that passes through the given point and is perpendicular to the graph of the given equation.

13. (–2, –2), $y = -\frac{1}{3}x + 9$

14. (–6, 5), $x - y = 5$

15. (–4, –3), $4x + y = 7$

16. (0, 1), $x + 5y = 15$

17. (2, 4), $x - 6y = 2$

18. (–1, –7), $3x + 12y = -6$

19. (–4, 1), $4x + 7y = 6$

20. (10, 5), $5x + 4y = 8$

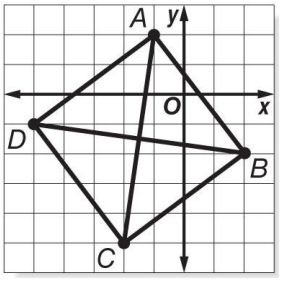
21. (4, –5), $2x - 5y = -10$

22. (1, 1), $3x + 2y = -7$

23. (–6, –5), $4x + 3y = -6$

24. (–3, 5), $5x - 6y = 9$

25. GEOMETRY Quadrilateral *ABCD* has diagonals $\overline{AC}$ and $\overline{BD}$. Determine whether $\overline{AC}$ is perpendicular to $\overline{BD}$. Explain.



26. GEOMETRY Triangle *ABC* has vertices *A*(0, 4), *B*(1, 2), and *C*(4, 6). Determine whether triangle *ABC* is a right triangle. Explain.