PERPENDICULAR LINES WORKSHEET

Determine whether the graphs of the equations are perpendicular lines.

1. $y = -4x + 3$ and $4y + x = -1$

6. $2x + 6y = -3$ and $12y = 4x + 20$

2. $y = \dfrac{-2}{3}x + 4$ and $3x + 2y = 1$

7. $6x + y = -4$ and $6x - y = 4$

3. $x + y = 6$ and $4y - 4x = 12$

8. $4y = 12x + 5$ and $9y + 3x = 2$

4. $2x - 5y = -3$ and $5x + 2y = 6$

9. $6y - x = -12$ and $\dfrac{1}{6}x + y = 3$

5. $y = -x + 8$ and $x - y = -1$

10. $x - 3y = 9$ and $8y + 24x = 16$

PERPENDICULAR LINES WORKSHEET

Write an equation for the line containing the given point and perpendicular to the given line. Graph <u>both</u> lines.

13. $(0,6)$; $y - 3x = 4$

17. $(-3, 2)$; $x - y = 5$

14. $(-2, 4)$; $y = 2x - 3$

18. $(-2, -3)$; $2y + 4x = 8$

15. $(0, 2)$; $3y - x = 0$

19. $(0, 0)$; $2x - y = 6$

16. $(2, 0)$; $2x + y = -4$

20. $(9, -2)$; $3x - 2y = 6$