Name Period

Int 2Acc **HW 5-7** **Unit 5**

Equations of Parallel & Perpendicular Lines

Write an equation for the line with the given slope and passes through the given point.

1. $m = \frac{1}{4}$ and $(1, 1)$

2. $m = -\frac{1}{2}$ and $(6, 0)$

3. $m = 1$ and $(2, -1)$

4. $m = -\frac{1}{3}$ and $(-6, -2)$

Write an equation for the line containing the given points.

5. A(8, -2) & B(-12, -17)

6. C(3, 22) & D(-1, -6)

7. E(-7, -25) & F(0, -4)

8. G(12, 12) & H(18, 15)

Write the equation for the line that passes through the two points given.

9. A(-1, 2) & B(-2, 1)

10. C(0, -12) & D(-6, -2)

11. E(1, -4) & F(3, -4)

12. G(-2, -3) & H(-2, 5)

Write an equation in slope-intercept form for each line described.

13. Passes through (-7, -4), perpendicular to $y = \frac{1}{2}x + 9$

14. Passes through (-1, -10), parallel to y = 7

15. Passes through (6, 2), parallel to $y = -\frac{2}{3}x + 1$

16. Passes through (-2, 2), perpendicular to $y = -5x - 8$

17. Passes through (4, 2) that is parallel to the line $y - 2 = 3(x + 7)$

18. Contains the point (-8, 12) that is perpendicular to the line containing the points (3, 2) and (-7, 2)

Write an equation in slope-intercept form for each line described.

19. Contains the point (5, 3) that is parallel to the line $y+11=\frac{1}{2}(4x+6)$

20. Write an equation in slope-intercept form for a line perpendicular to $y=-2x+6$ containing (3, 2).

21. Write an equation for a line parallel to $y=4x-5$ containing (-1, 5).

22. Write an equation of the line that is parallel to the graph of $y=7x-3$ and passes through the origin.

23. Contains the point (-10, 2) that is perpendicular to the line containing the points (0, -8) and (5, 17)

24. Contains the point (21, 12) that is parallel to the line containing the points (30, 8) and (-15, -7)

25. Perpendicular to the line shown and containing the point (9, -6)