Lesson 6.5 Homework Algebra 1

Write the equation of the horizontal line through each point listed below.

1. (8, 15) $y = 15$
2. (-5, 12) $y = 12$
3. (-48, -22) $y = -22$
4. (16, -31) $y = -31$

Write the equation of the vertical line through each point listed below.

5. (7, 13) $x = 7$
6. (-4, 21) $x = -4$
7. (-8, -50) $x = -8$
8. (16, -25) $x = 16$

Write the equation of the line that is PARALLEL to the given line (My Line) and through the given point.

9. My line: $y = 3/5x + 7$, Given Point: (3, -5) $y + 5 = \frac{3}{5}(x - 3)$
10. My line: $y = 4x - 1$, Given Point (-7, 2) $y - 2 = 4(x + 7)$
11. My line: $y = -\frac{1}{2}x + 9$, Given Point (11, 15) $y - 15 = -\frac{1}{2}(x - 11)$

Calculate the slope perpendicular to the given slope.

12. $m = 2/7$ $-\frac{7}{2}$
13. $m = -3/2$ $2/3$
14. $m = 6$ $-1/6$
15. $m = -7$ $1/7$

Write the equation of the line that is PERPENDICULAR to the given line (My Line) and through the given point.

16. My line: $y = 3/4x - 8$, Given Point: (6, 7) $y - 7 = -\frac{4}{3}(x - 6)$
17. My line: $y = -5/6x + 10$, Given Point: (-11, 14) $y - 14 = \frac{6}{5}(x + 11)$
18. My line: $y = 3x + 2$, Given Point: (-9, 1) $y - 1 = -\frac{1}{3}(x + 9)$
19. My line: $y = -10x - 4$, Given Point: (25, -12) $y + 12 = \frac{1}{10}(x - 25)$