WORKSHEET 4.3 – Parallel and Perpendicular Lines

Name: _____ Hour: _____ Date: _____

SECTION 1: Write the equation of the line that passes through the given point and is PARALLEL to the given line. Write answers in Slope-Intercept Form. (4.3.A)

1) **PARALLEL TO:** $y = 2x - 9$
PASSES THROUGH: (5, 8)

2) **PARALLEL TO:** $y = \frac{1}{3}x + 9$
PASSES THROUGH: (9, 2)

3) **PARALLEL TO:** $y = x + 11$
PASSES THROUGH: (-7, -4)

4) **PARALLEL TO:** $y = -\frac{5}{2}x - 10$
PASSES THROUGH: (4, -6)

5) **PARALLEL TO:** the line that passes through the points (-4, -8) and (10, -1)
PASSES THROUGH: (8, -7)

6) **PARALLEL TO:** the line that passes through the points (-2, 4) and (-5, -8)
PASSES THROUGH: (1, -1)

SECTION 2: Write the equation of the line that passes through the point and is PERPENDICULAR to the given line. Write answers in Slope-Intercept Form. (4.3.A)

7) **PERPENDICULAR TO:** $y = -\frac{2}{3}x + 4$

PASSES THROUGH: (6, 2)

8) **PERPENDICULAR TO:** $y = \frac{5}{4}x - 2$

PASSES THROUGH: (10, 1)

9) **PERPENDICULAR TO:** $y = x + 1$

PASSES THROUGH: (9, -2)

10) **PERPENDICULAR TO:** $y = 3x + 8$

PASSES THROUGH: (-12, -9)

11) **PERPENDICULAR TO:** the line that passes through the points (0, 1) and (7, 2)

PASSES THROUGH: (1, -5)

12) **PERPENDICULAR TO:** the line that passes through the points (9, -7) and (-9, -3)

PASSES THROUGH: (6, 3)