Name: _____ Class: _____ Date: _____

Algebra 2 CP Worksheet 2.4

1. **Write an equation of the line that has the given slope and y-intercept.**

   a.) m = 4 b = -4

   b.) m = -6 b = 3

   c.) m = $\frac{4}{3}$ b = 6

   d.) m = 8 b = 0

2. **Write an equation of the line in POINT-SLOPE FORM that passes through the given point and has the given slope.**

   a.) (2, 1) m = -2

   b.) (7, -5) m = 1

   c.) $\left(\frac{1}{2}, 4\right)$ m = -8

3. **Write an equation of the line in SLOPE-INTERCEPT FORM.**

   a.) (-1, -10) m = 3

   b.) (-4, 3) m = 5

   c.) (2, -1) (3, 8)

   d.) (7, 2) (-4, -6)

4. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(-2, 1)$ and is PARALLEL to $y = 2x + 5$.**

5. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(-3, -5)$ and is PARALLEL to $y = 12 + x$.**

6. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(10,-12)$ and is PARALLEL to $3x+4y=4$.**

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7. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(1,3)$ and is PERPENDICULAR to $y=2x-1$.**

8. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(1,1)$ and is PERPENDICULAR to $y=\frac{1}{2}x-7$.**

9. **Write an equation of the line in SLOPE-INTERCEPT FORM that passes through $(-3,1)$ and is PERPENDICULAR to $2x+3y=12$.**