Name: _____

2.1.D3 – POINT-SLOPE FORM OF A LINEAR EQUATION

Past due on: _____ Period: _____

1. Which of the equations below represent the line passing through the points $(2, 3)$ & $(4, -7)$? Select ALL that apply.

   A) $5x + y = 13$ B) $y + 7 = -5(x - 4)$ C) $y = -5x + 13$ D) $y - 7 = 5(x - 4)$

2. Line ℓ contains the points $(0, 4)$ & $(2, 0)$. Show that the point $(-25, 81)$ does or doesn't lie on the line ℓ.

Write an equation of the line to satisfy the given conditions. The final equation should be written in slope-intercept form.

3. The slope $= -4$; the x-intercept $= 7$

4. The x-intercept $= 3$; the y-intercept $= -5$

5. The slope is -3 & the contains the point $(-2, 1)$

6. The line contains the points $(-3, 5)$ and $(0, 1)$

7. The linear function has $f(-2) = 7$ & $f(3) = -3$

8. The line contains the points $(-4, -3)$ and $(2, 6)$

9. The line is parallel to $y = 2x - 7$ and passes through the point $(2, -5)$.

10. The line is perpendicular to $y = 5x - 3$ and passes through the point $(2, 1)$.