

SPARK Hybrid Education Center

Mathematics | Week 3: Graphing Linear Equations | Upper Level

Name: _____ Date: _____

Directions: Solve each problem. Show your work in the space provided. Circle your final answer.

1. Graph $y = x - 2$ and list the x- and y-intercepts.
2. Graph $y = -3x + 6$. Where does it cross each axis?
3. Does the point (3, 7) lie on the line $y = 2x + 1$?
4. Find the x-intercept of $y = 4x - 8$.
5. Write the equation of a horizontal line through (0, 5).
6. Two lines: $y = 2x + 1$ and $y = 2x - 3$. Are they parallel?
7. Graph $y = -x + 4$ and identify 3 ordered pairs on the line.
8. Find slope and y-intercept of $2y = 6x + 10$.

--- Answer Key (Cut before distributing) ---

1. x-int: (2,0); y-int: (0,-2)
2. x-int: (2,0); y-int: (0,6)
3. Yes: $2(3)+1=7$ OK
4. $x = 2$
5. $y = 5$
6. Yes; same slope $m=2$
7. (0,4),(2,2),(4,0)
8. $m=3$, $b=5$

