

SPARK Hybrid Education Center

Mathematics | Week 4: Equations from Graphs & Tables | Upper Level

Name: _____ Date: _____

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

1. From the table: $x = 0, 1, 2, 3 \rightarrow y = 1, 3, 5, 7$. Write the equation.
2. A graph passes through $(0, 4)$ and $(3, 10)$. Write the equation.
3. Table: $x=0 \rightarrow y=8$, $x=2 \rightarrow y=4$, $x=4 \rightarrow y=0$. Write the equation.
4. Does $y = 3x + 2$ represent a proportional relationship? Why?
5. Find the equation of a line passing through $(1, 5)$ and $(3, 9)$.
6. A table shows: $(0, 0), (1, 4), (2, 8), (3, 12)$. Write the equation.
7. Identify whether each is linear: $y = x^2$, $y = 2x + 3$, $y = 5$.
8. The cost of a taxi is \$3 plus \$2 per mile. Write and graph the equation.

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

1. $y = 2x + 1$
2. $y = 2x + 4$
3. $y = -2x + 8$
4. No; $b \neq 0$ means it doesn't pass through origin
5. $y = 2x + 3$
6. $y = 4x$
7. Not linear; linear; linear
8. $y = 2x + 3$

