Identify if the Table is Linear.

| $X$ | -1 | 0 | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $Y$ | 10 | 8 | 6 | 4 | 2 |

The easiest way to determine of a table is linear is to find an adding or subtracting pattern. Since the x values always add one and the $y$ values always subtract 2 this table is linear.

| $X$ | 2 | 4 | 6 | 8 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $Y$ | 3 | 4 | 7 | 8 | 9 |

The $x$ values always add 2 each time, but the $y$ values do not always add one so the table is not linear.

| $X$ | -1 | 3 | 4 | 5 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $Y$ | -3 | 5 | 7 | 9 | 13 | 15 |

Since the $x$ values do not have a pattern we could compare the slope of each pair of coordinates, however until we learn slope the alternate way to tell it is linear would be to plot the ( $\mathrm{x}, \mathrm{y}$ ) points on a graph. If the graph is a straight line, it is linear.

