Lines are a special type of curve, because their slope (change) is constant. Consider the line shown.

![Graph of a line with points (-1, -5), (1, -1), and (2, 1) labeled]

1. First we will use points (-1, -5) and (1, -1) to calculate the slope.

\[
\frac{(-1) - (-5)}{(1) - (-1)} = \frac{-1 + 5}{1 + 1} = \frac{4}{2} = 2.
\]

The curve rises from -5 to -1 over -1 to 1.

2. Next we will use points (-1, -5) and (2, 1) to calculate the slope.

\[
\frac{(1) - (-5)}{(2) - (-1)} = \frac{1 + 5}{2 + 1} = \frac{6}{3} = 2.
\]

The curve rises from -5 to 1 over -1 to 2.

3. We see again that which points we choose does not affect the slope.
4. Using the property of a line that the slope (change) is constant, we will test if the following data is linear.

\[
\begin{array}{ccccc}
  x & 1 & 2 & 3 & 4 & 5 \\
  y & 3 & 7 & 11 & 15 & 19 \\
  \Delta & 4 & 4 & 4 & 4 & 4 \\
\end{array}
\]

This is a line.

5. Using the property of a line that the slope (change) is constant, we will test if the following data is linear.

\[
\begin{array}{ccccc}
  x & 1 & 2 & 3 & 4 & 5 \\
  y & 2 & 5 & 10 & 17 & 26 \\
  \Delta & 3 & 5 & 7 & 9 & 9 \\
\end{array}
\]

This is not a line.