## Finding the slope from two points

The slope of a line describes how steep it is or the slant of the line.


The slope can be found by using two points on the line to determine its vertical change and its horizontal change.

The slope can be found by using the

In math, we call this the rise and run. The rise is the difference of the $\boldsymbol{y}$-cocrdinates $(\boldsymbol{\Delta} \boldsymbol{y})$ and the ${ }_{\text {point } 1}$ run is the difference of the $x$ cocrdinates ( $\boldsymbol{\Delta x}$ ).

ratic, rise-cver-run. In other words, you find its vertical change ( $\mathbf{\Delta} y$ ) and its horizontal change ( $\mathbf{\Delta x}$ ).Then make a fraction with the $\Delta y$ on the top of the $\Delta x$. Check out the example below.

Example :- Two points on a line are $(2,3)$ and $(1,1)$.
To find the slope calculate the difference between the two X and Ycoordinates.
The easiest way to do this is to write points on top of each other and subtract.

$$
\begin{array}{rc}
(\mathbf{X}, \mathbf{Y}) & \text { SLOPE } \\
(2,3) & \mathbf{\Delta y}=\frac{2}{\mathbf{\Delta} \times}=\frac{(1,1)}{-(1,2)}
\end{array}
$$

Do it yourself :-
Q. Use the points from each line to determine its slope :-

1. $(6,3),(3,2)$
2. $(4,7),(5,3)$
3. $(1,0),(2,-1)$
4. $(9,5),(6,1)$
5. $(11,9),(-3,-5)$
6. $(2,7),(3,0)$
