

#### **4.1 – GRAPHING FUNCTIONS:**

**You need 3 pieces for a graph:**

- 1) The function (equation)**
- 2) Create a table of ordered pairs (x,y)**
- 3) Graph the points on the coordinate plane**

**You have to create the data table of ordered pairs by choosing your x values:**

**\*\*\* Choose 0 and then another x. This works many times although not for everything. You need 2 points to graph a line \*\*\***

**x and y are not #s anymore. You are actually getting ordered pairs to graph.**

Graphing 4.1

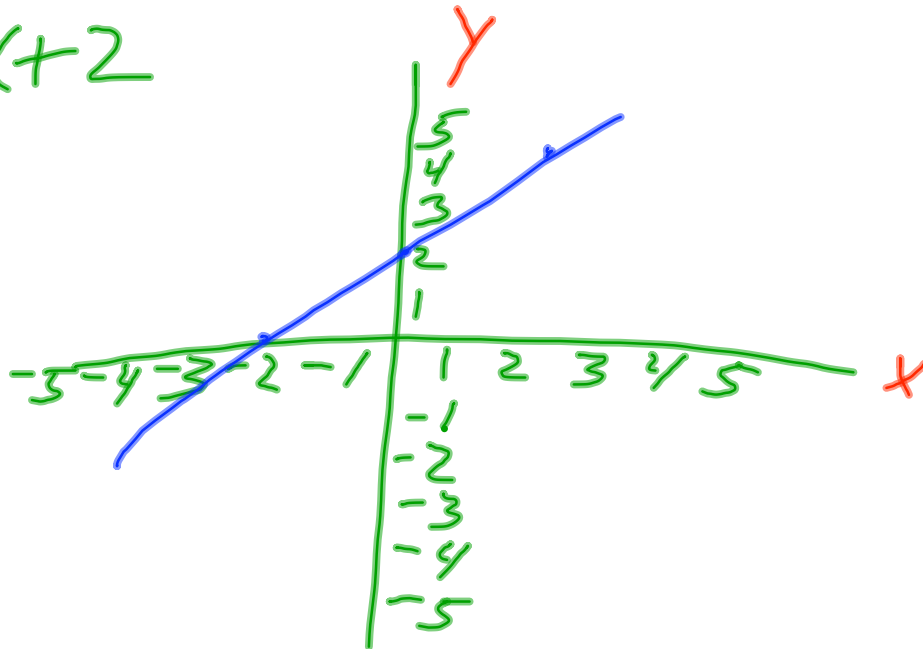
$$y = x + 2$$

① The equation

## ② The data table

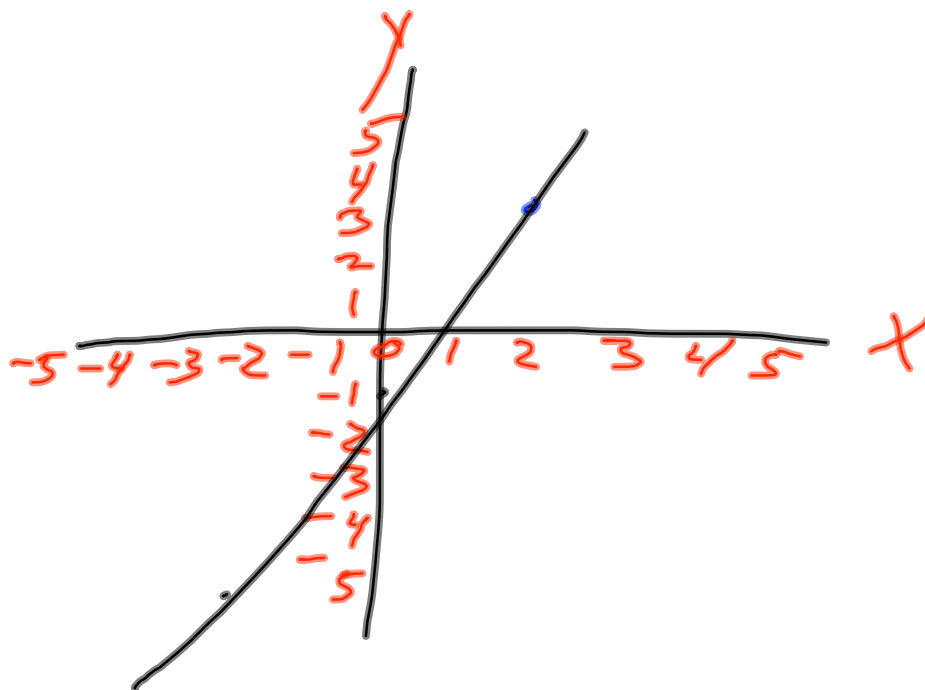
$x$	Equation	$y$	Point <small><math>x, y</math></small>
2	$y = x + 2$ $y = 2 + 2$	4	(2, 4)
0	$y = x + 2$ $y = 0 + 2$	2	(0, 2)
-2	$y = x + 2$ $y = -2 + 2$	0	(-2, 0)

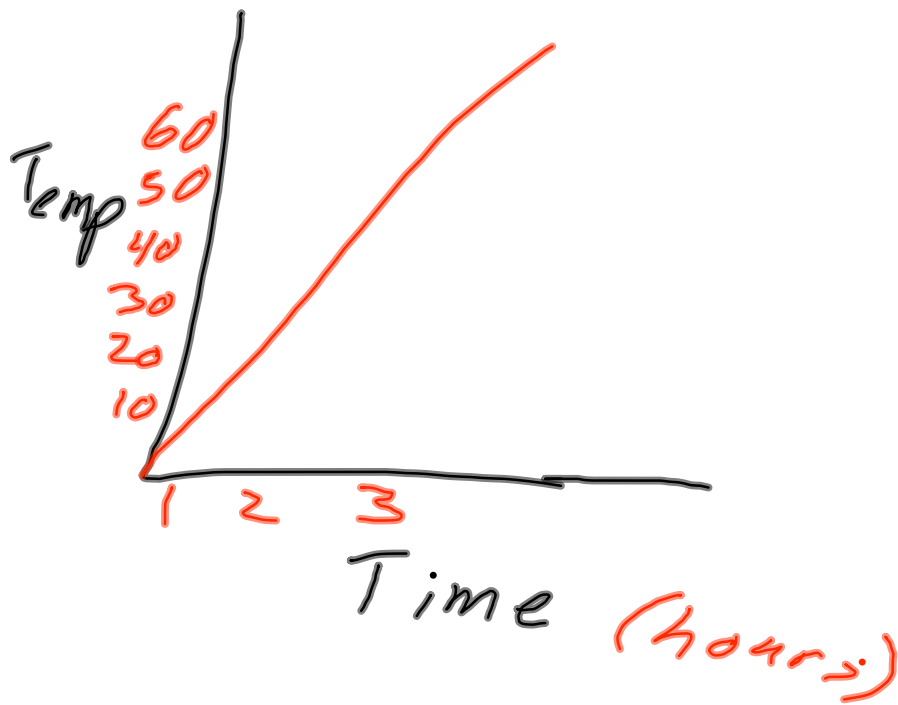
$$y = x + 2$$



①  $f(x) = 2x - 1$  graph

x	equation	y	Point (x, y)
2	$y = 2(2) - 1$	3	(2, 3)
0	$y = 2(0) - 1$	-1	(0, -1)
-2	$y = 2(-2) - 1$	-5	(-2, -5)

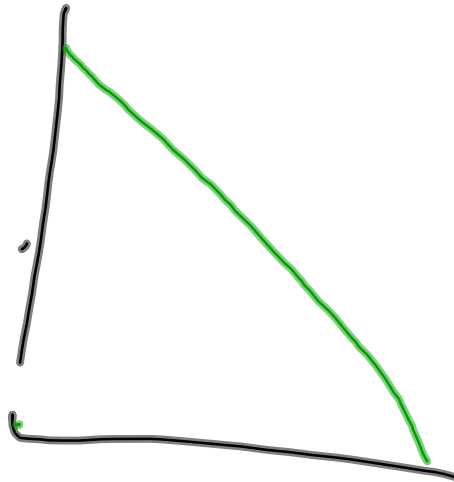






Altitude  
oxygen decreases as altitude  
increases

gas



time

Car  
gas  
time

$(1, 10)$

