

FUNCTIONS & LINEAR RELATIONSHIPS DICTIONARY

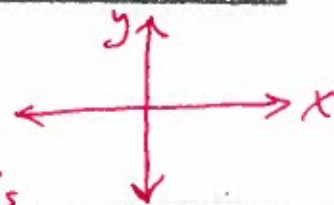
GRAPHING BASICS

DEFINITION

EXAMPLE OR VISUAL

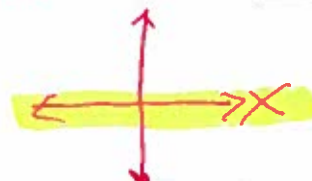
COORDINATE PLANE

A plane by the intersection of a horizontal number line called the x-axis and a vertical number line called the y-axis



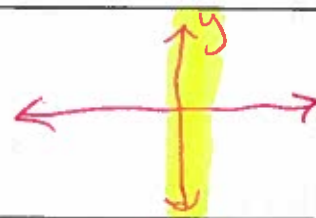
X-AXIS

horizontal axis on a coordinate plane that displays the first number of an ordered set



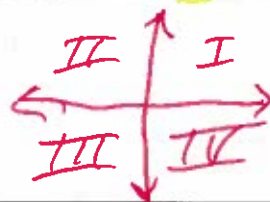
Y-AXIS

the vertical axis on the coordinate plane



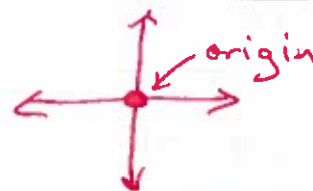
QUADRANTS

the four sections that make up the coordinate plane



ORIGIN

Intersection of the x and y-axis. $(0, 0)$



ORDERED PAIR

a pair of numbers used to locate a point on a graph

(x, y)
ex. $(2, 3)$

X-COORDINATE

x-value of an ordered pair represents the horizontal placement of the point

(x, y)
↑
x-coordinate

Y-COORDINATE

y-value of an ordered pair represents the vertical placement of the point

(x, y)
↑
y-coordinate

RELATION

Any set of ordered pairs

DOMAIN

the set of all x 's
in a relation

RANGE

the set of all y 's
in a relation

FUNCTION

relation in which each
element of the domain is
paired with one element of the range

INDEPENDENT
VARIABLE

x -value

DEPENDENT
VARIABLE

y -value

VERTICAL LINE
TEST

any vertical line passes through
the graph of a relation no
more than once, then it is a function

