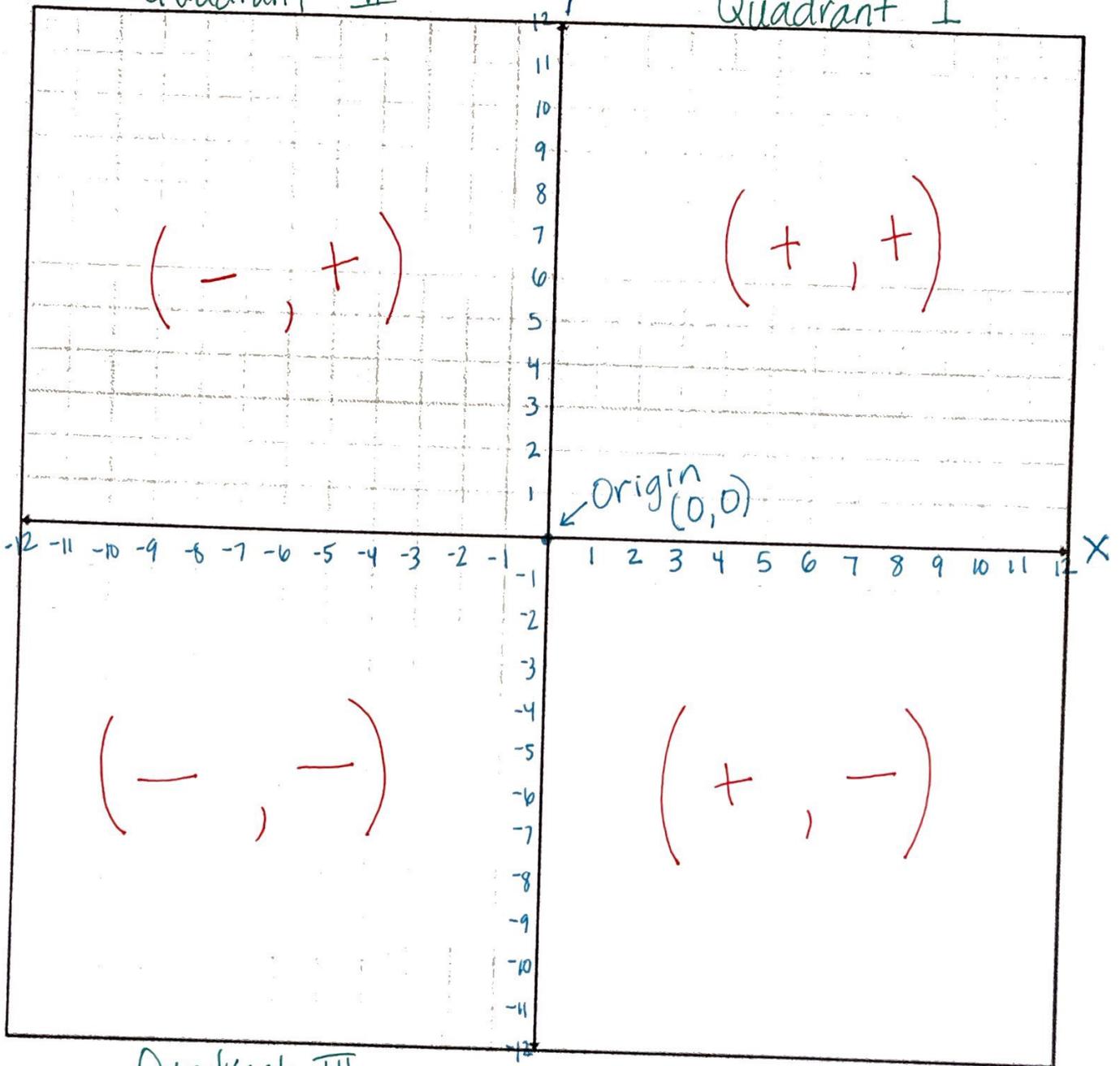


Coordinate Plane

Quadrant II

Quadrant I



Quadrant III

Quadrant IV

Ordered pair

(x, y)

$(\leftarrow^+, \uparrow^+)$



Human Coordinate Plane

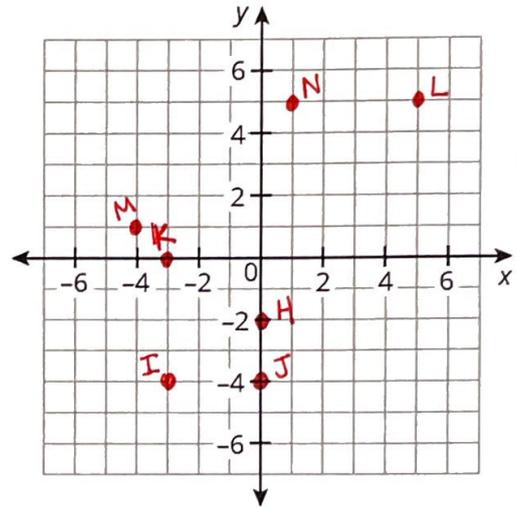
➤ Your teacher is going to direct students to stand at certain locations on the human coordinate plane.

- 1 For each student, plot and label the point where the student is standing on the coordinate plane. Then record the coordinates of that point in the table.

HABITS OF MIND

- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Student	Location	Student	Location
A	(0, 0)	H	
B	(2, 3)	I	
C	(4, 0)	J	
D	(-1, -3)	K	
E	(3, -1)	L	
F	(4, -5)	M	
G	(-5, 3)	N	



TOPIC 2

- 2 Where did each student always start? How did each student know which direction to go first?

THINK ABOUT...

Help each other decide how to plot the ordered pairs.

- 3 What do you notice about the coordinates of points that are in the same quadrant?

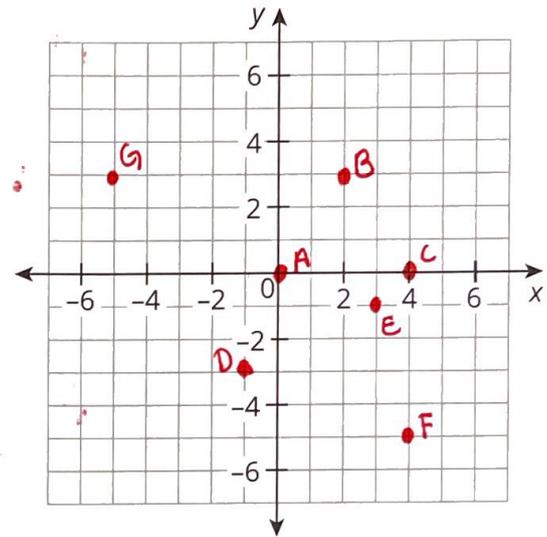


Human Coordinate Plane

> Your teacher is going to direct students to stand at certain locations on the human coordinate plane.

- 1 For each student, plot and label the point where the student is standing on the coordinate plane. Then record the coordinates of that point in the table.

Student	Location	Student	Location
A		H	$(0, -2)$
B		I	$(-3, -4)$
C		J	$(0, -4)$
D		K	$(-3, 0)$
E		L	$(5, 5)$
F		M	$(-4, 1)$
G		N	$(1, 5)$



- 2 Where did each student always start? How did each student know which direction to go first?

Started at the origin (0,0)

Right (+) or left (-) first

- 3 What do you notice about the coordinates of points that are in the same quadrant?

Same quadrant \Rightarrow same sign (positive or negative) on the x, y coordinates

HABITS OF MIND

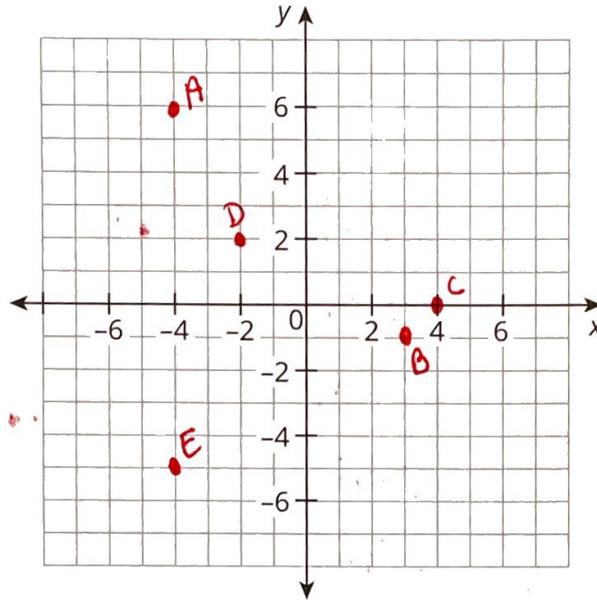
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

THINK ABOUT...

Help each other decide how to plot the ordered pairs.



- Your teacher is going to select students to plot ordered pairs that meet specific conditions. The students will select locations that satisfy those conditions.
- 4 For each student, plot and label the point where the student is standing on the coordinate plane. Then record the coordinates of that point in the table.



Student	Condition	Location
A	Negative x-coordinate	$(-4, 6)$
B	Negative y-coordinate	$(3, -1)$
C	On an axis	$(4, 0)$
D	In QII	$(-2, 2)$
E	In QIII	$(-4, -5)$

- 5 Compare the ordered pairs you plotted and identified in this activity. What is similar about the points you graphed in each region or on each axis of the graph?

- a) QI: $(+, +)$
- b) QII: $(-, +)$
- c) QIII: $(-, -)$
- d) QIV: $(+, -)$
- e) x-axis: $(x, 0)$
- f) y-axis: $(0, y)$