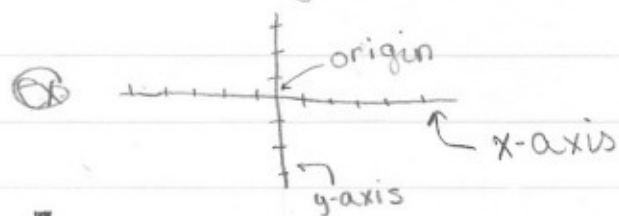


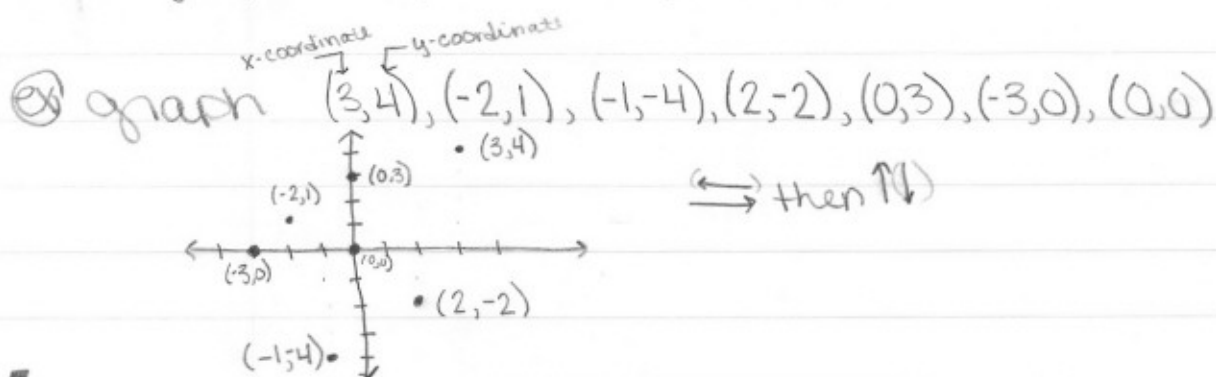
1.3

The Rectangular Coordinate System



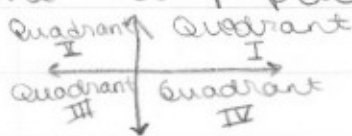
We use ordered pairs to label each point on the Coordinate system. Written (x, y) .
 First # is the x-axis # (on x-axis + is right, - is left.)
 Second # is the y-axis # (on y-axis + is up, - is down)

We "graph" or "plot" the points.



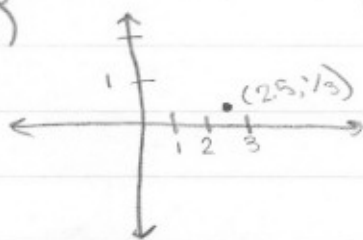
Remember, "over then up/down"

We name the 4 pieces the axes creates.



Can graph any real #, not just integers

ex plot $(2.5, 1/3)$



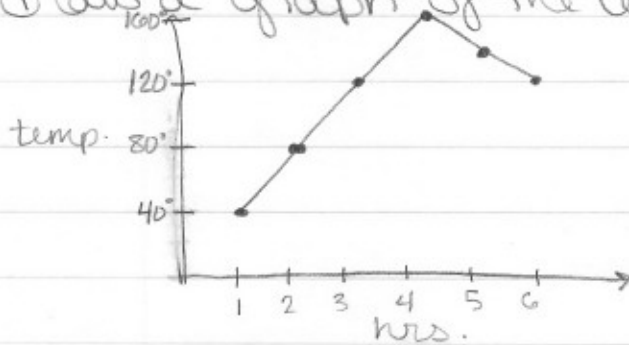
Graphing Mathematical Relationships

Sometimes a graph helps us visualize things

ex) I'm cooking. I measure the temp. of my food every hour for 6 hours, I get these results

hr	temp
1	40°
2	80°
3	120°
4	160°
5	140°
6	120°

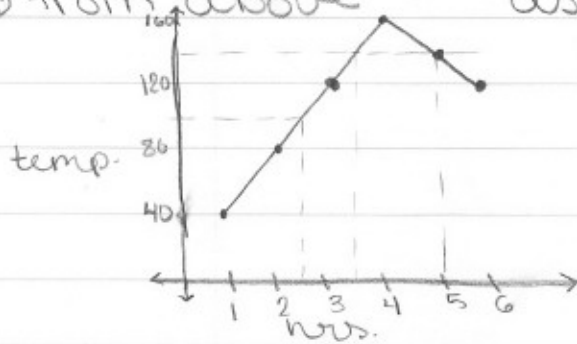
draw a graph of the temp of my food over 6 hrs.



So temp of my food increased for 4 hrs then decreased for 2 hrs.

Reading Graphs

ⓧ from above assume I started cooking at hr. 1.

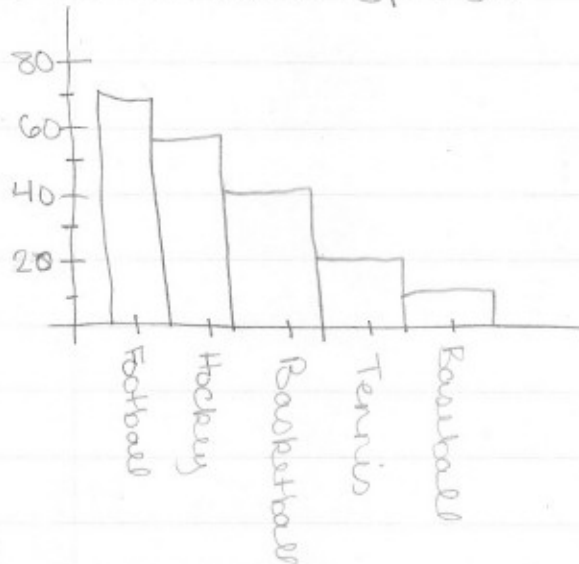


- What was the temp of food before I cooked it?
40°
- What was the temp after 2½ hrs of cooking?
about 100°
- When was my food 140°?
3½ hrs and 5 hrs.

Using a bar graph

Bar Graphs

ex) Favourite Sport



How many people prefer Basketball?

40

Which Sports have less than 30 people? Tennis & Baseball

Could also go horizontal

