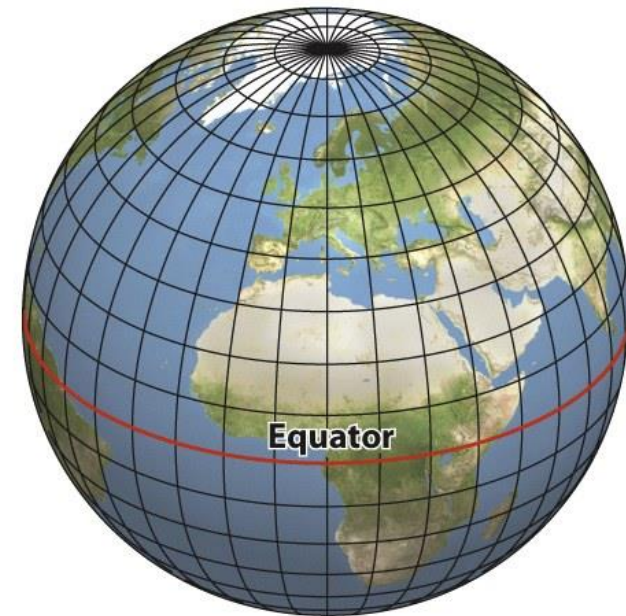
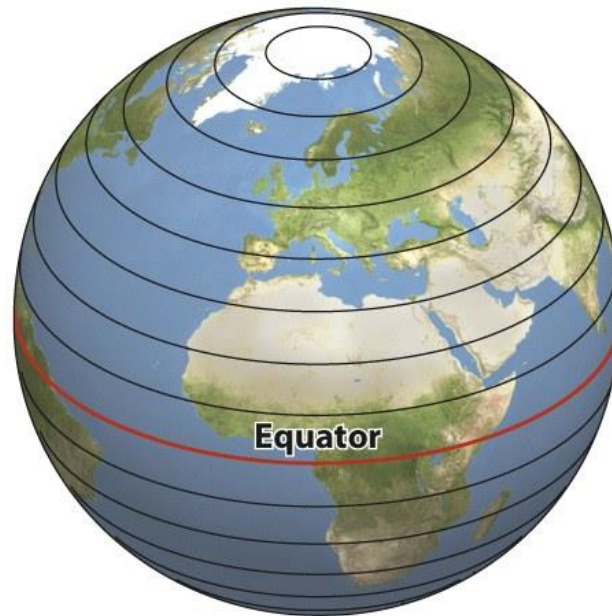


Geographic Grid & GPS



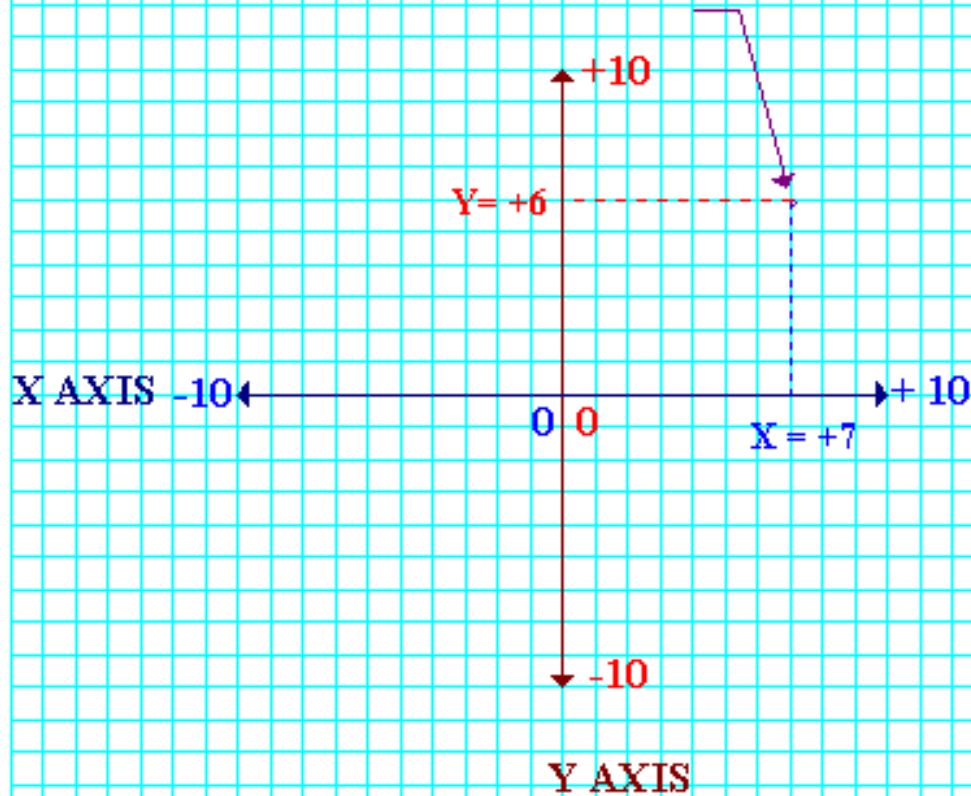
How do we determine location?

- ▶ Relative vs. Absolute
- ▶ In math - graphing



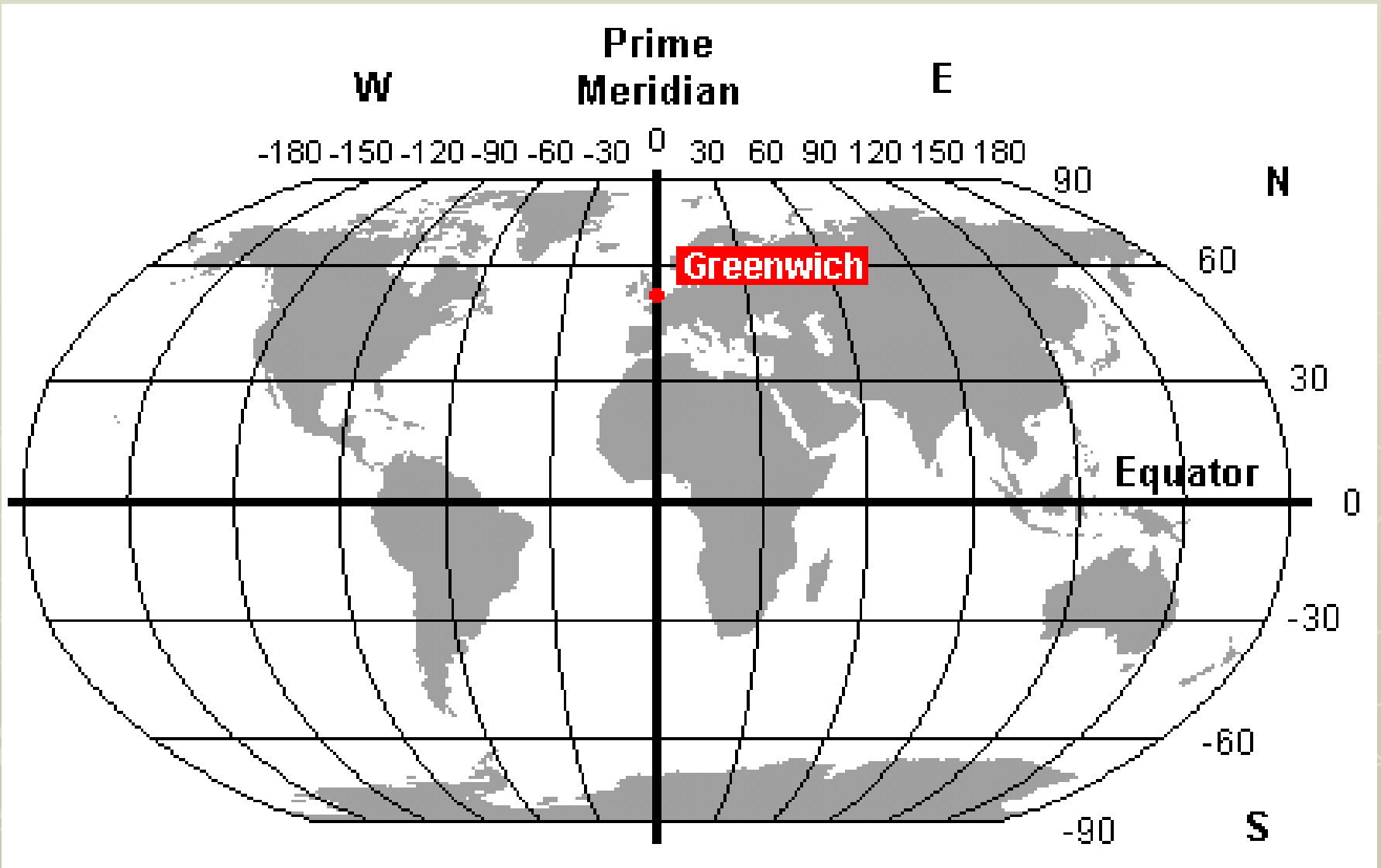
Cartesian Coordinates

Point with X and Y Coordinates
of $X = +7$ and $Y = +6$
Expressed as Ordered Pair
 $(+7, +6)$



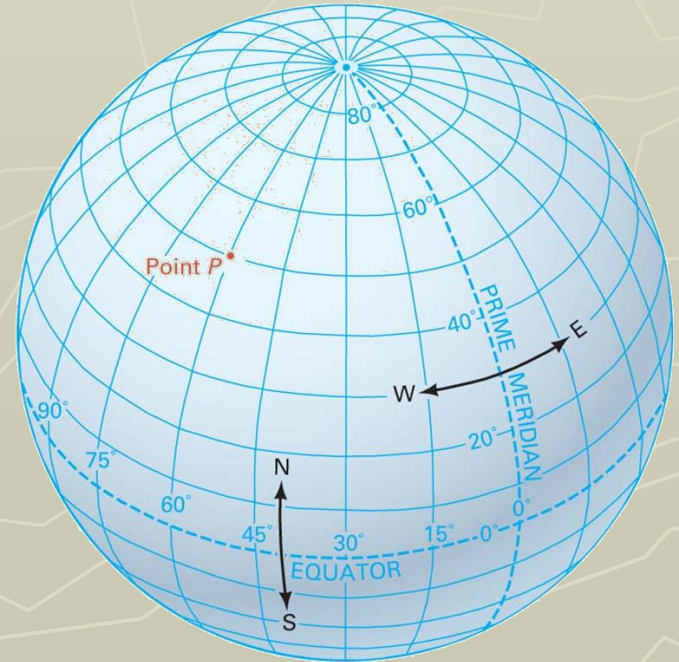
Cartesian Coordinates in a Plane
A Point Defined by X and Y Coordinates

On the globe



Latitude & Longitude

- ▶ Coordinates are given in degrees ($^{\circ}$)
- ▶ Degrees are divided into minutes ($'$) and seconds ($''$)



Latitude & Longitude

▶ Degrees/Minutes/Seconds (DMS) notation:

▶ **14°27'32"N, 65°52'09"W**

▶ Decimal Degree (DD) notation:

▶ **14.458889°N, 65.869167°W**

OR

▶ **14.458889°, -65.869167°**

Activity 3

Part 1: Use a GPS to collect data points

► Lat/Long, other (notes)

Part 2: Make a map of your points with ArcGIS
Online





GPS receiver:
 receives satellite signals to accurately determine location, elevation, and other useful information.

