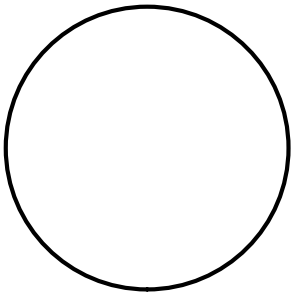
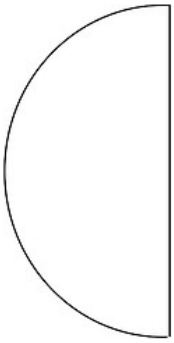
Review: Components of a Map

Feb 12-8:04 PM

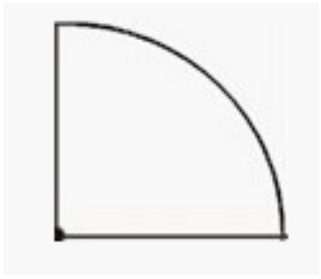
How Many Degrees in a Circle?



Semi Circle?

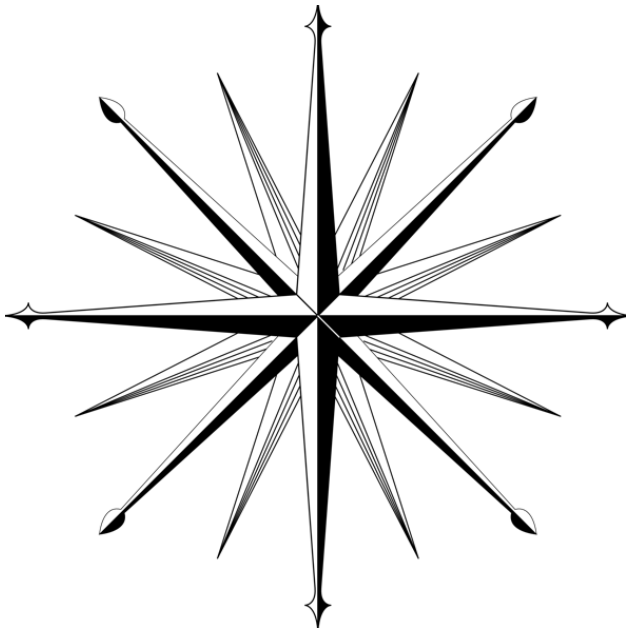


Quarter Circle?



Feb 12-8:04 PM

Labelling a Compass Rose



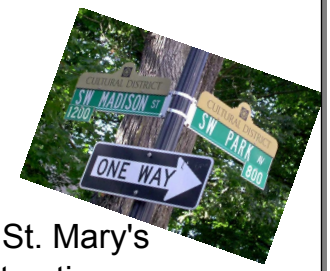
Feb 12-8:18 PM

Parts of a Compass

Compass Points	Compass Bearings
Definition: words used to describe a specific direction on a compass	Definition: measured in degrees to provide a more accurate directional reading
Examples:	Examples:

Feb 12-8:07 PM

How do we get from place to place?

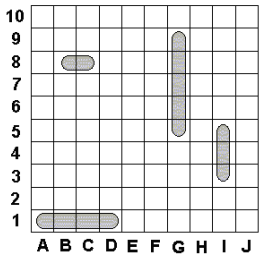


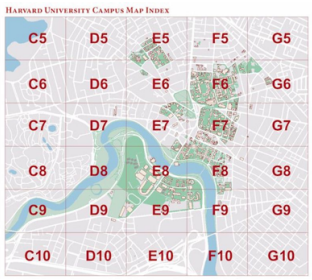
If you were to give me directions from St. Mary's to the Movie Theatres what kind of instructions would you include?

Feb 12-8:12 PM

Grid Systems

- Help us locate particular places on a map





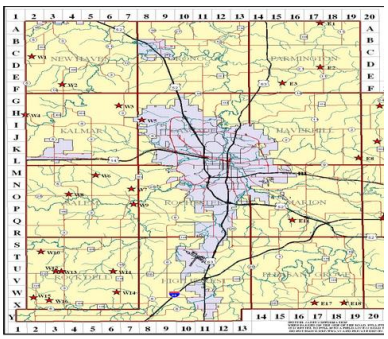
Three types of Grid Systems:

1. Alphanumeric
2. Military
3. Latitude/Longitude

Feb 13-8:49 PM

Alphanumeric Grid

- Often used on road maps
- Utilizes numbers and letters to identify squares on a map



Feb 13-8:49 PM

Alphanumeric Grid:Class Activity

	11	12	13	14	15
A					
B					
C				★	
D					
E					
F		♥			
G					
H					
I				✓	
J					

What grid square is the ♥ located?

What grid square is the ✓ located?

What grid square is the ★ located?

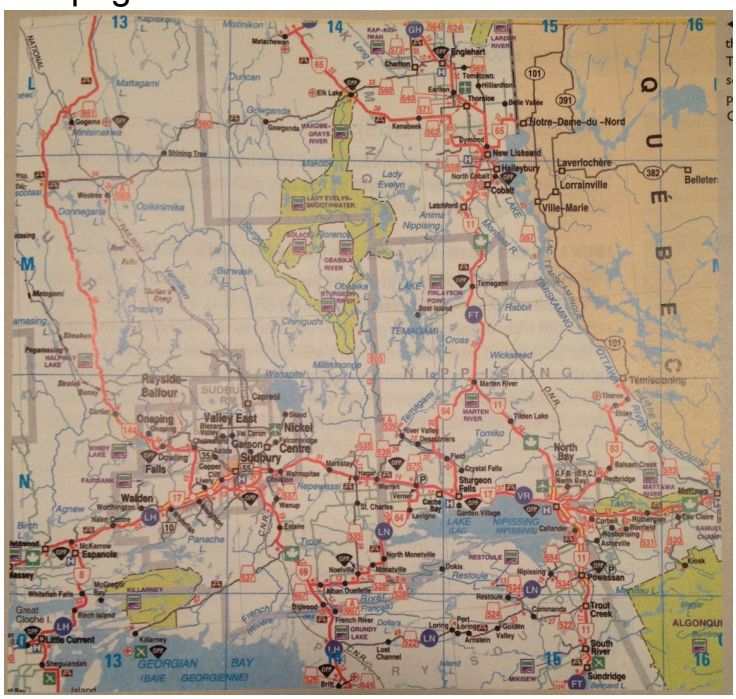
Place the ✕ in the D12 grid

Place the ⇧ in the H15 grid

Feb 13-8:49 PM

Textbook Activity

- Complete questions 1-7, 9 and 10 on page 32 using the map on page 33



Feb 13-9:07 PM

Review

Feb 20-12:48 PM

Military Grids

Where did this grid come from?

- During WWI the latitude and longitude system was too complicated and slow to use
- It became easier for soldiers to use a grid system on a map rather then using the latitude and longitude system

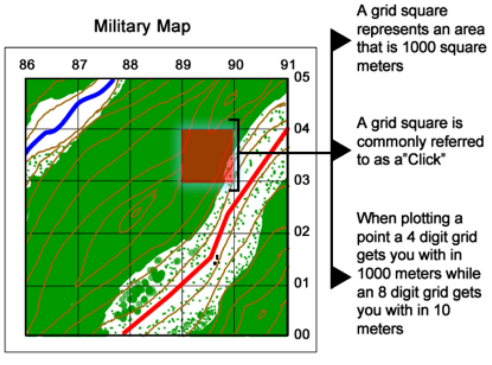
Feb 14-8:29 PM

Military Grids

- Grid of blue lines used to identify squares in a grid pattern
- Generally used on topographic maps

How Do I Read A Military Grid??

- Easting: vertical line running from top to bottom of the map
- Northing: horizontal line across the map
- By combining the digits from the easting and the northing we are able to identify a square on the map
- 1st: read to the RIGHT
- 2nd: read UP

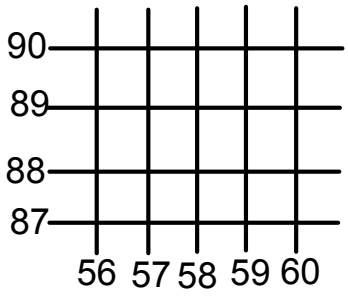


Feb 14-9:51 PM

Military Grid Example: 567893

567: Find the vertical 56 line and then go right 7

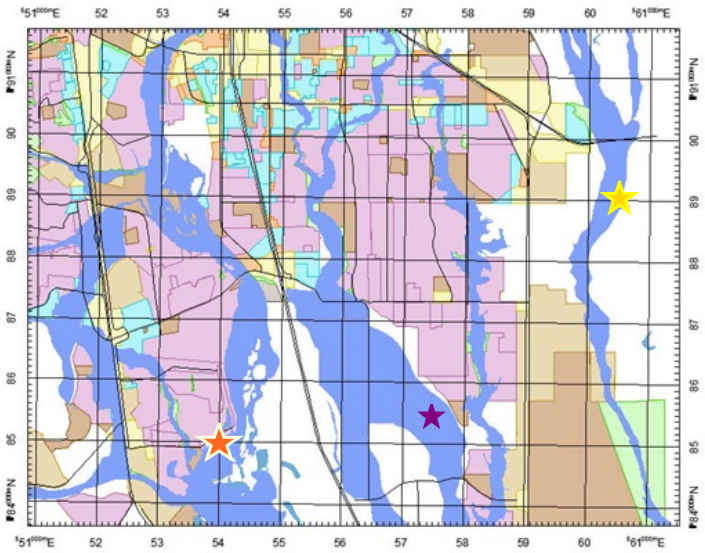
893: Find the horizontal line and then go up 3



**Remember "*Read Right Up*"

Feb 14-9:35 PM

Military Grid Example



1) What are the coordinates for the 3 stars using the military gird?

2) On the Map mark the following:

a) 550880

b) 597866

Feb 20-12:58 PM

Latitude and Longitude

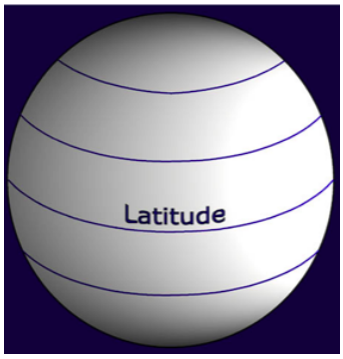
- Most well-known grid system used today
- Grid lines extending north-south and east-west
- Latitude is measured [redacted] and [redacted] of the [redacted]
- Longitude is measured [redacted] and [redacted] of the [redacted] [redacted]
- Cooridates are always written with the latitude first, followed by the longitude
- Example: Owen Sound, ON is located at:

44° N, 80° W

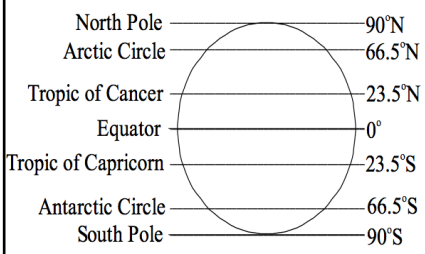
Latitude Longitude

Feb 14-9:59 PM

Parallels of Latitude



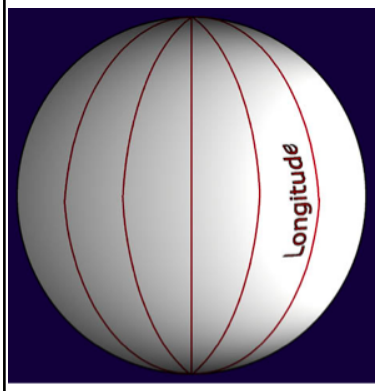
- Imaginary lines running east-west around the globe
- These lines are parallel to each other
- Located approximately 111km apart on the earths surface
- Latitude lines are measured North and South of the Equator
- Example:



- Miami, Florida is 25 degrees *north* of the equator, therefore it is written 25°N
- Brisbane, Australia is 25 degrees *south* of the equator, therefore it is written 25°S

Feb 15-8:33 AM

Meridians of Longitude

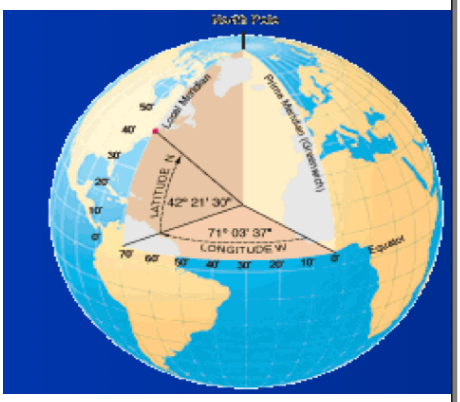


- Imaginary lines
- Run north-south and meet at the poles
- Measured east of the Prime Meridian for 180 degrees and west for 180 degrees
- The Prime Meridian (passes through the community of Greenwich, England) divides the earth in half and is located at 0°.
- Example:
  - Miami Florida is near the 80° *west* of the Prime Meridian, therefore it is written 80°W

Feb 15-8:33 AM

Latitude and Longitude

- Picture Latitude and Longitude as an angle measured from the centre of the earth
- Why Degrees, Minutes, Seconds??
  - In order to accurately point a spot on the earth
  - Each degree of latitude or longitude is divided into 60 parts called minutes
  - Each minute is then divided into 60 seconds
  - 1 degree of latitude=111km
  - 1 minute=1.6 km
  - 1 second = 30 metres



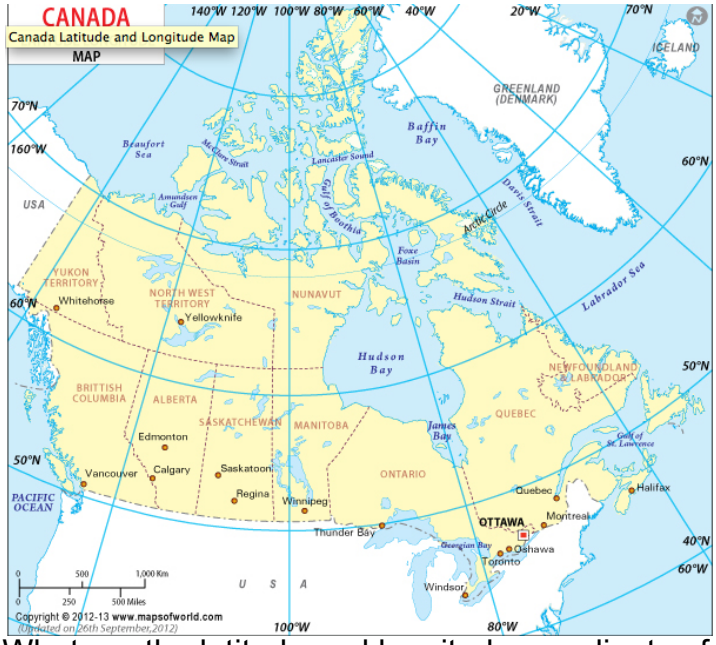
} = Precise location on earth!

Example: for a more precise location of Owen Sound the latitude and longitude would read:

44.5667° N, 80.9333° W

Feb 15-12:42 PM

Examples of Latitude and Longitude



1) What are the latitude and longitude coordinates for Thunder Bay, Ontario?

2) What are the latitude and longitude coordinates for Yellowknife, Northwest Territories?

Feb 19-7:16 PM

1) What are the latitude and longitude coordinates of the Aral Sea?

2) Plot a new city at the following coordinates:

A) 50°N and 90°E

B) 65°N and 118°E

Feb 19-7:16 PM

Latitude and Longitude Assignment

Please hand in when completed!

Feb 19-9:20 AM

Journal # 2

A) Based on what you have learnt about Map Grids (Alphanumeric, Military and Latitude/Longitude), which concept do you think is the most accurate? Explain your choice

B) Based on your response in Part A, explain how you would teach a friend how to use this specific map grid when looking at a map

Feb 19-9:26 AM