

The Seasons 9/23

- sun (direct)
- fall equinox (equal night)

Fall (Sept 22) equinox
Winter (Dec 21) solstice
Spring (Mar 20) equinox
Summer (Jun 21) solstice

Prime Meridian - ~~180°~~ ^{0°} (because 1/2 of 360°)
International Date Line - ~~0°~~ ^{180°} (midnight) new day
Longitude lines - divided (24) parts of a day...

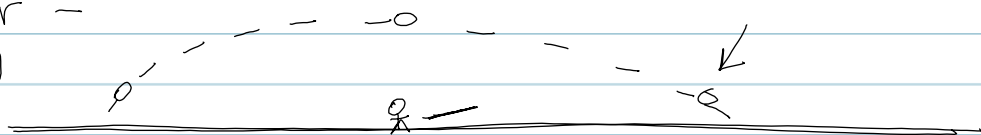
Equator - 0° latitude } climate
Poles - 90° latitude }

23.5° N (lat) Tropic of Cancer } tropics 1/3
23.5° S (lat) Tropic of Capricorn }

1/3 temperate zone (4 seasons)
~~deciduous~~ deciduous

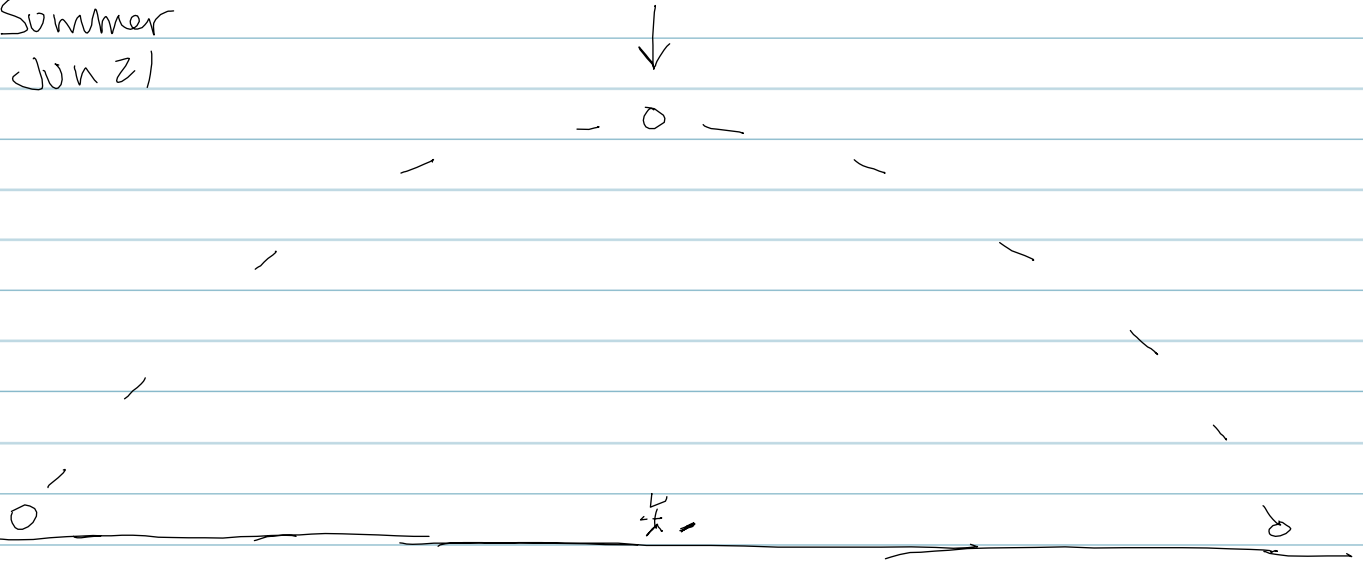
Top 1/3 polar zone

Winter -
Dec 21



longest shadows

Summer
Jun 21



shadow - shortest (noon)

Earth

Year = 365.25
(6 hrs)

365.25
365.25
365.25
365.25 } 1 extra day

July
August

Leap years - mult of 4

Sept.
Oct
Nov
Dec