

SLIP SCGS Geography

Understanding the environment through maps and photographs

TOPOGRAPHICAL maps

→ Shows:

Physical + human features that occur on a part of the Earth's surface.

→ Uses:

Point/Line/Area symbols to represent features & areas.

→ May:

Show how the environment changed from physical to human through OUR actions.

What are Maps?

→ They are graphic representations of Earth's surface drawn to scale on a flat surface.

* Main features shown on a map

→ Physical Environment

→ Human environment

Parts of a Topo map

→ Title

→ GRID LINES

→ North arrow

→ shows where North is facing

→ Scale

→ size ratio of [actual : on map]

→ Legend/Key

→ Tells you what each symbol represents.

(Other)
TYPES of maps

① Atlas maps

→ Continents, countries, oceans, big physical features

② General Reference maps

→ Street/tourist maps

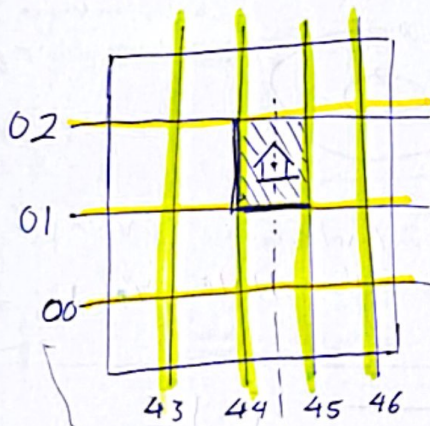
→ street directions.

→ Contour lines

Reading Topo Maps

Grid Lines

→ Vertical & Horizontal Lines drawn on maps to help us locate ~~spc~~ places & certain features easily.



Horizontal Lines (→)

→ NORTHINGS

Vertical Lines (↑)

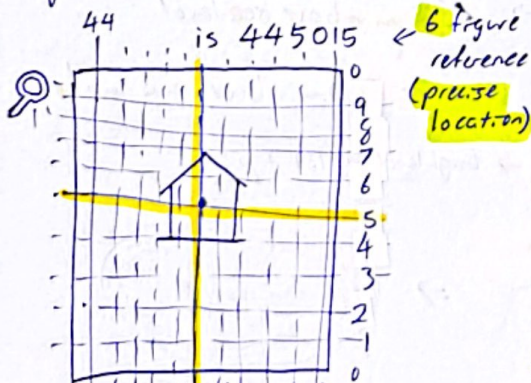
→ EASTINGS

* Always read Eastings first

THEN northings

→ Take numbers from LOWER LEFT.

eg.  is $\begin{matrix} E & N \\ 44 & 01 \end{matrix}$ ← 4 f.g. Ref.



← 6 figure reference (precise location)

Distance Measuring → Ruler/paper/string.

Curved dist.

→ Use string to follow roughly the middle of the line & mark the string measure the length of the string that was used to trace the line.

Straight line

curved distances

Ratio between given map distance and the actual ground distance.

Map Scales

1 : 25 000

* No units in a ratio

Ans:

⇒ 1 cm on the map REPRESENTS

25000 cm on the ground.

* ⇒

1 cm on map = 25000 cm in real life

Representative fraction

→ 1 cm to 30 km

⇒ 1 cm to 3000 000 cm

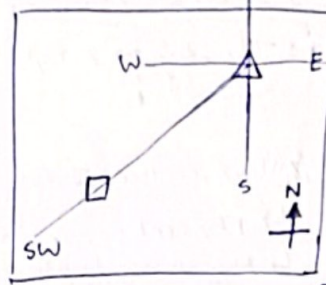
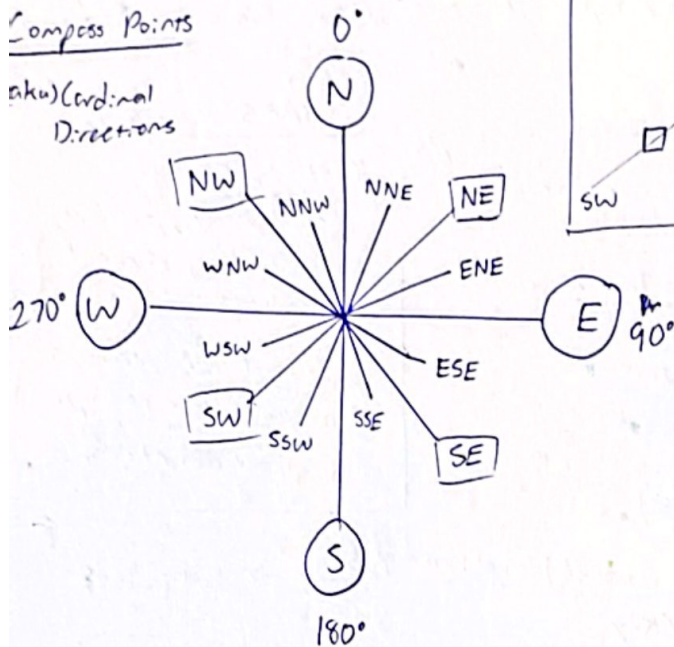
* MUST convert both to the same unit (cm)

1 : 3 000 000

EXPRESSING DIRECTIONS

Compass Points

aka) Cardinal Directions



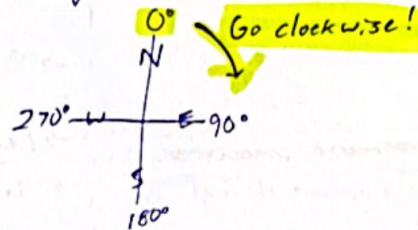
What is the direction of B from A?

- draw w/ Δ in middle
- draw line from Δ to B
- give a cardinal direction

⇒ B is South west of A.

Grid Bearings

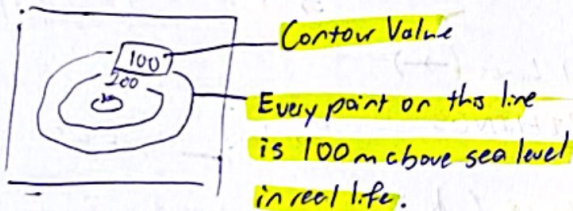
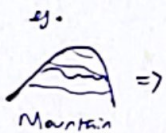
↳ Basically Compass directions but in degrees — more precise!!!



PHYSICAL FEATURES DISPLAYED ON A TOPO MAP

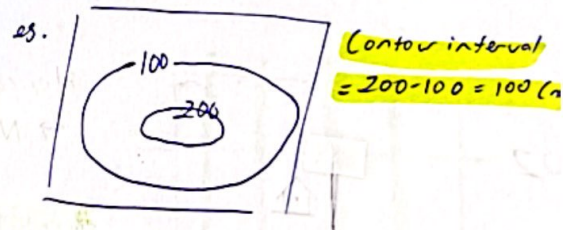
Contours

↳ Lines on a map that join every point of a certain height above sea level



Contour Intervals

↳ The difference in height between two adjacent contour lines



* Contour lines will never cross each other.

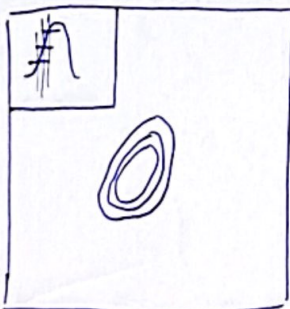
* Used for land/terrain too

* Contour intervals remain CONSTANT throughout the WHOLE map.

Gradient of a slope

Steep slope → Contour lines closer together

Gentle slope → Contour lines spread further.

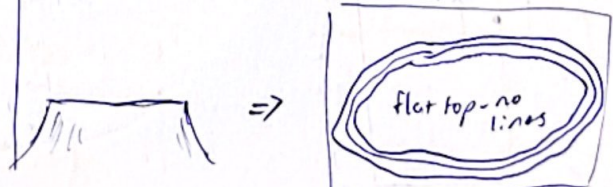


Hills VS Mountains

Hills → < 600m above sea level

Mountains → ≥ 600m above sea level

Plateaus → highland w/ flat top



Ridges

↳ elongated piece of highland.



⇒

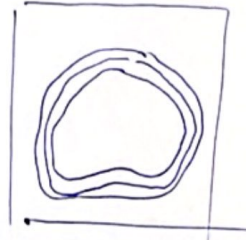


Plateau

↳ highland w/ flat top



⇒



Settlement Patterns

① Linear

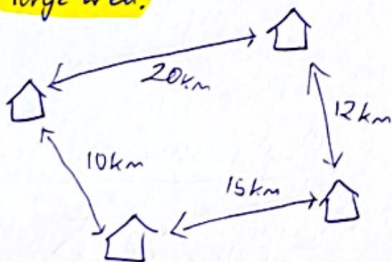
↳ Along rivers/roads etc. long things



★ Easy accessible: water ⇒ drink, wash, bathe
transport ⇒ trade/Go to work/school
eg. Community of Champlain, Quebec, Canada.

③ Dispersed

↳ Houses spaced far apart from each other, spread out across a large area.



★ Space for agriculture

★ Usually found in areas of low population, high ~~pop~~ difficult terrains, no water, lots of agriculture.

eg. Tonami plain, Japan

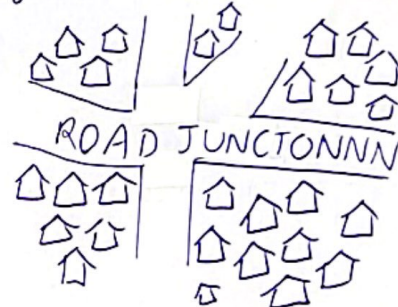
* River → line

Lake → shape

② Nucleated

↳ Clustered around a point/landmark

eg. lakes, junctions, valleys



★ Everything close by, access to resources

eg. Little Thetford, England

Economic Activities → Benefits → Education
Jobs Income source

eg.

→ Agriculture/Farming

→ Education

→ Tourism (people visit the place for farmstay etc)

→ Mining of minerals

→ Fishing

→ Industrial/manufacturing