

# TOPOGRAPHICAL FORMS AUR TECHNICAL TERMS

# **INTRODUCTION**

- **MAPS KAYI PRAKAR AUR SCALE KE HOTE HAIN.**
- **ZAMIN PAR ALAG ALAG KUDRATI NISHAN HOTE HAIN JESSE KI PAHAR, GHATI, REGISTAN, TALAB, NADI ETC ETC.**
- **INKO TOPOGRAPHICAL FORM KEHTE HAIN. MAPS PAR ALAG KUDRATI NISHAN KO ALAG ALAG TARIQUE SE DIKHAYA JATA HAI.**
- **MAP READING KARNE KE LIYE INKO SAMAJNA JARURI HAI.**
- **ISKE ALAWA KUCH DEFINITION BHI HOTE HAIN JESSE KI CONTOUR, GRADIENT, TRIG HEIGHT ETC. INKO BHI SAMJHANA JARURI HAI.**

# **PREVIEW**

- **UDDESH**
- **PART 1 - TOPOGRAPHICAL FORMS**
- **PART II - TECHNICAL TERMS**
- **CONCLUSION**

# **PART I**

# **TOPOGRAPHICAL FORMS**

# **TOPOGRAPHICAL FORMS**

- **IS KARWAI MEIN KUDRATI ZAMIN KI BANAWAT AUR ALAG ALAG PRAKAR KE ZAMINI NISHAN KO MAP PAR UTARTE HAIN**
- **IN KUDRATI ZAMIN KO MAP PAR DIKHANE KE LIYE KUCH TARQIUE APNAYE GAYE HAI JIS SE INKO EK MAP PAR PEHCHANE AUR UNKI VISHESTAEN MALUM HOONE MEIN ASANI HO.**
- **LAKSHYA HOTA HAI KI KISSI BHI ZAMINI NISHAN KO SAHI JAGAH, SAHI BANAWAT AUR SAHI HEIGHT / ALTITUTE KA DIKHAYA JAYE.**
- **TOPO FORMS MEIN JADATAR PAHAR, PLATEAU, VALLEY, PANI KE FEATURE AUR VEGETATION HOTE HAIN.**

# **TOPOGRAPHICAL FORMS**

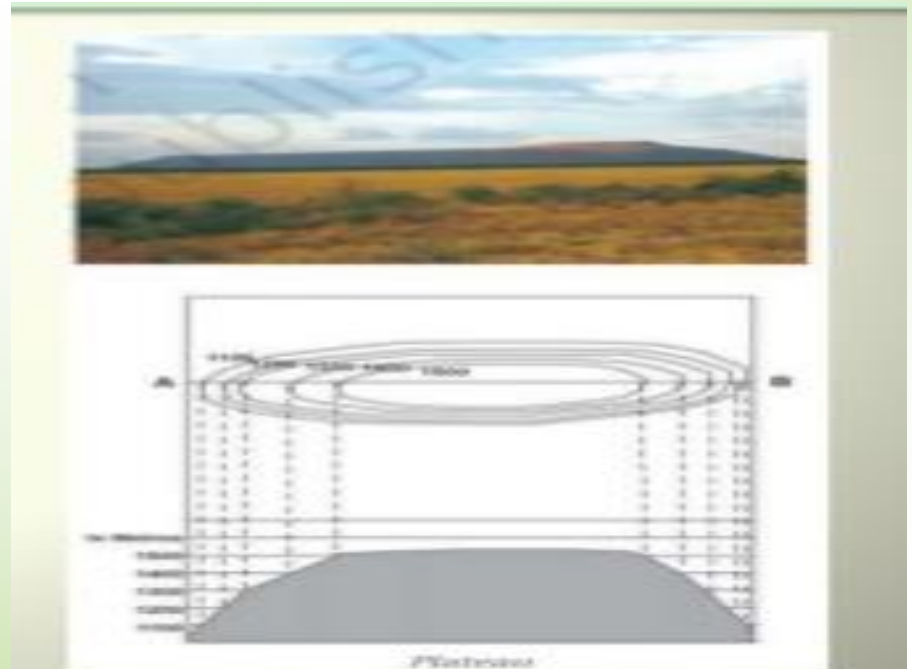
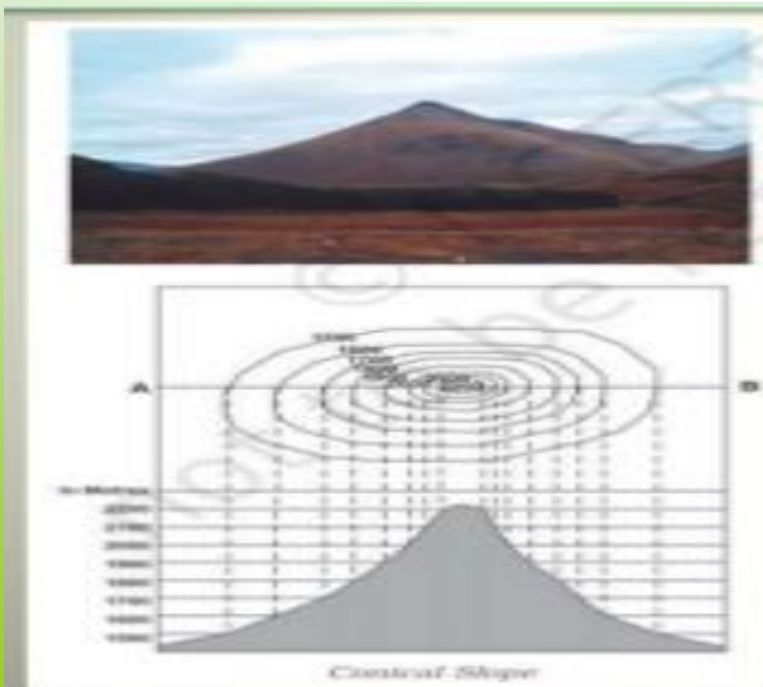
- **CREST.** SABSE UNCCHI PAHARAON KE SILASLE KO JODTI HUI EK LINE
- **PLATEAU** – EK PAHARI YAH UTTHI ZAMIN JO UPAR SE TABLE KI TARAF SAMTAL HAI
- **WATER SHED.** PAHARI KA WOH SILSALA JO KI BARISH KE PANI KO PAHAR KE DO SIDE PAR VIBHAJIT KARTA HAI AUR GHATI MEIN DALATA HAI.
- **SPUR.** MAIN PAHAR SE BAHAR NIKALTA HUA EK RIDGE JO PAHAR KI UNCHE POINT SE NICHHE HOTA HAI AUR GHATI KI TARF JATA HAI.
- **SADDLE.** DO PAHARON KI CHHOTION KO JODTA HUA EK SILSALA.
- **DUNE.** RETE KA PAHAR YAH TEKRI KA SILSALA JO KI HAWA KE ASAR SE BANTA HAI.
- **DEFILE.** KOI BHI JAGAH JO EK FAUJ KI TUKRI KO FELNE SE ROKE AUR USKO KAM JAGAH MEIN KENDRIT KARE.

# TOPOGRAPHICAL FORMS

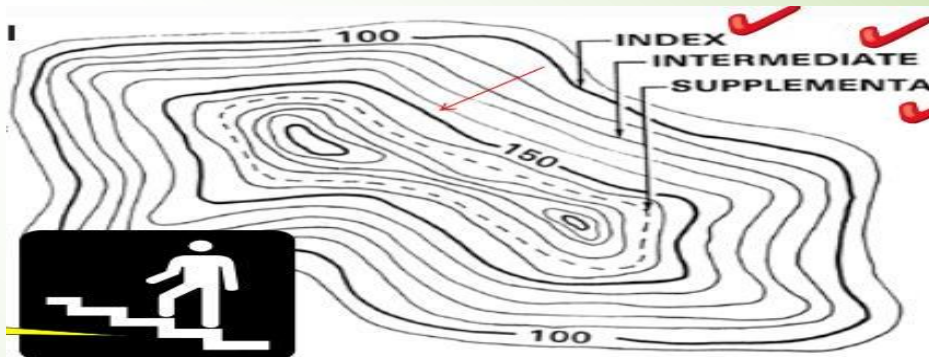
- CLIFF. WHO JAGAH JAHAN PAHARI K SILSALA TEJI SE GIRTA HAI AUR CHATTAN BANATA HAI.
- RAVINE. WHO GHATI JIS KE NADI NE KAT KAT KAR GHERE AUR CHATTAN JEESE KAR DIYE HAI.
- KNOLL. EK AKELA PAHAR
- PASS. PAHAR KE SILSALE MEIN WHO JAGAH JAHAN SE ROAD, TRACK JATA HAI. YEAH PASS SADDLE YAH DO PAHARI KE BICH SABSE NICCHE PAYE JATE HAI. HAR SADDLE PAR PASS NAHI HOTA.
- RE-ENTRANT. DO SPUR KE BICH MEIN JAHAN PAHARI KA SILSALA ANDAR KI TARAF GHUMTA HAI.
- DEAD GROUND. DABI ZAMIN JIS KI WAJAH SE WAHAN PAR CHUPA DIKAYI NAHIN DETA HAI

# CONTOUR LINE

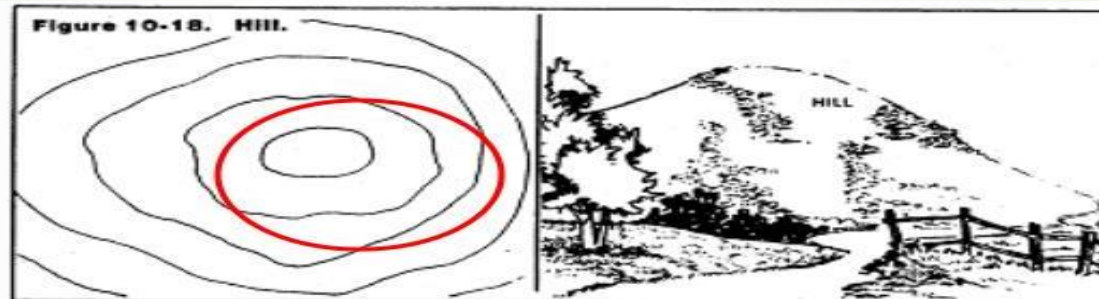
- YEAH MAP PAR EK KALPANIK LINE HOTI HAIN JO UN JAGAH KO JODTI HAIN JINKI EK HI HEIGHT HAI.
- CONTOUR LINE PAHARI ILAQUE MEIN ISTEMAL HOTI HAIN.
- IN LINE KO PAD KAR PAHAR KI BANAWAT, UNNCHAI, DHALAN, AUR BAKI KAFI DETAIL MALUM PAD JATE HAIN.







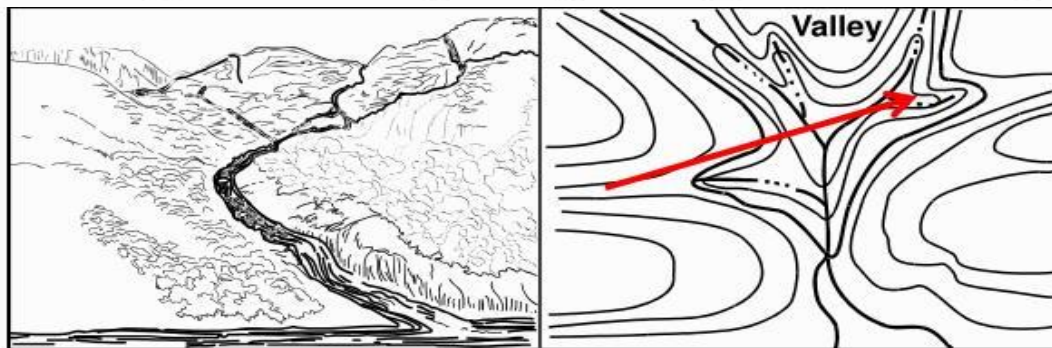
## CONTOUR LINES



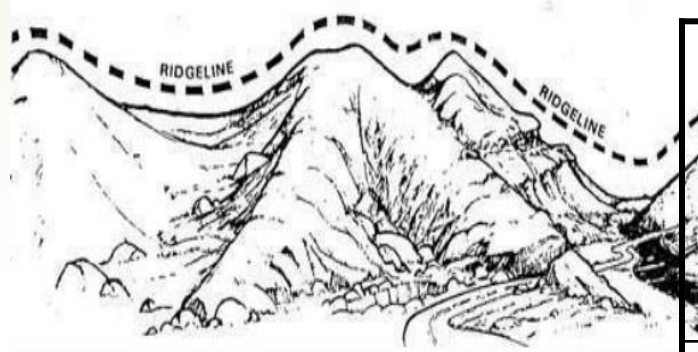
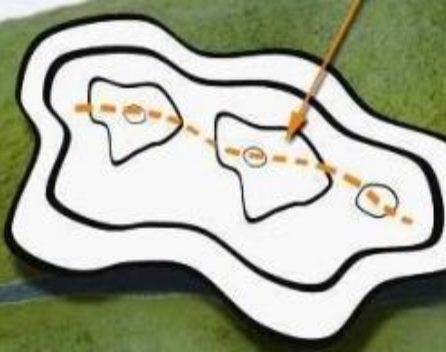
## PAHAR/KNOLL (EK AKELA PAHAR)



## CONTOUR INTERVAL

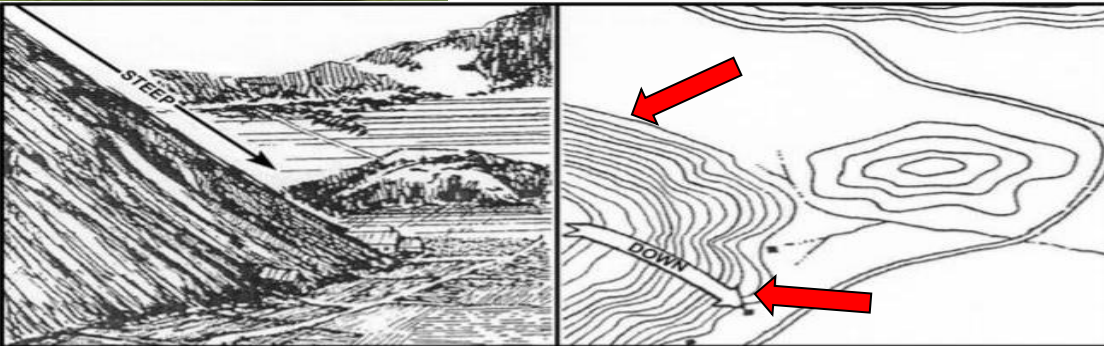


## GHATI aur NALA

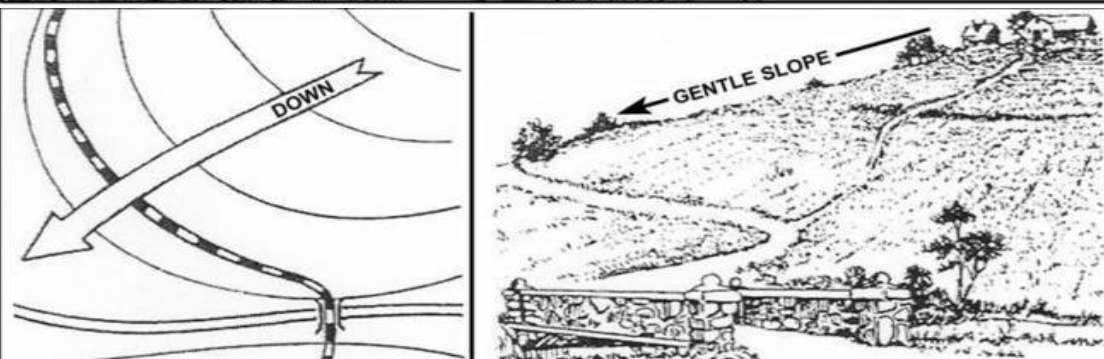


# PAHARI KA SILSALA

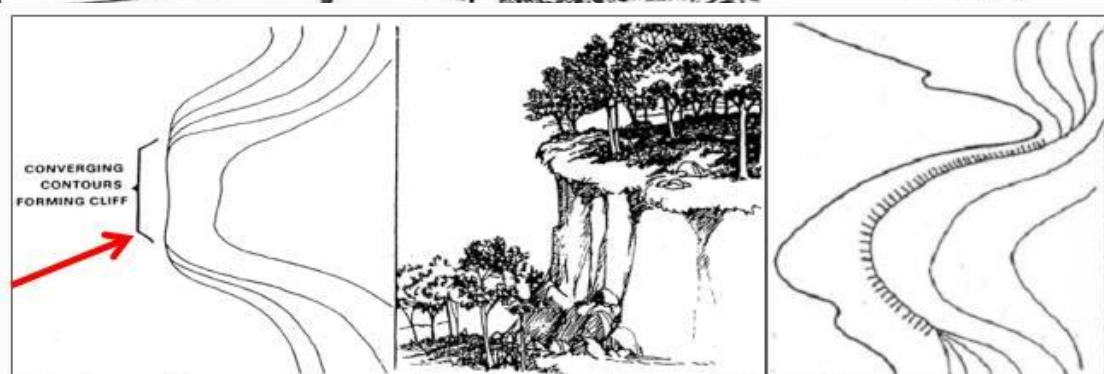
## Ridge line



**JAB CONTOUR LINE  
NAZDIK HOTI HAIN TOH  
SLOPE JADA HOTI HAI**

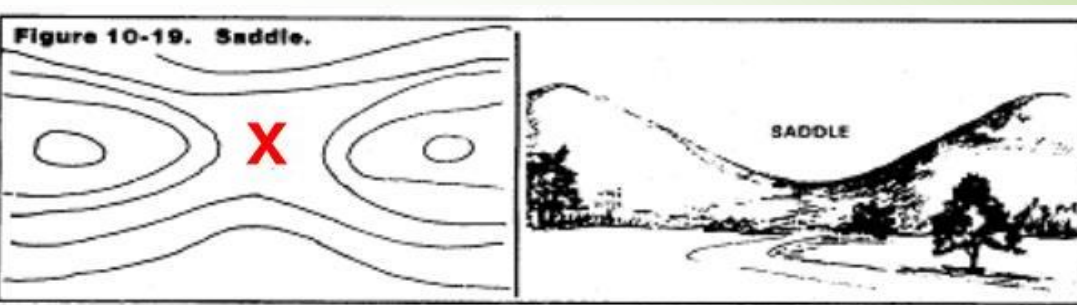


**JAB CONTOUR LINE  
DOOR HOTI HAIN TOH  
SLOPE KAM HOTI HAI**

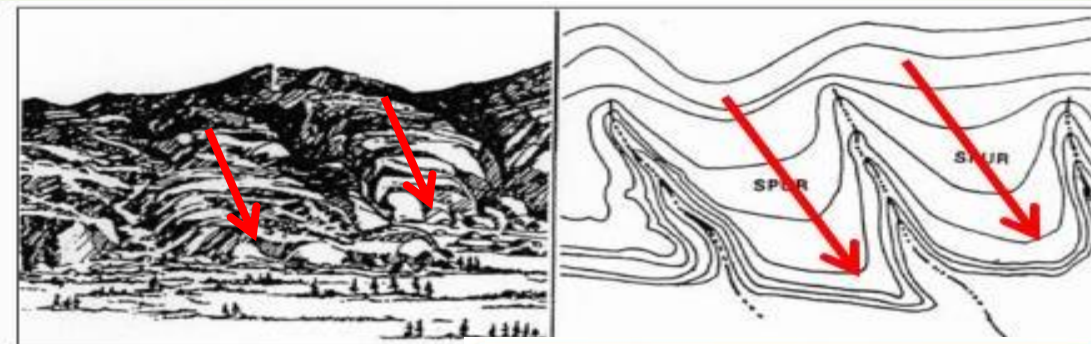


**JAB CONTOUR LINE  
CHUPAK KE HOTI HAIN  
TOH CHATAN HOTI HAI**

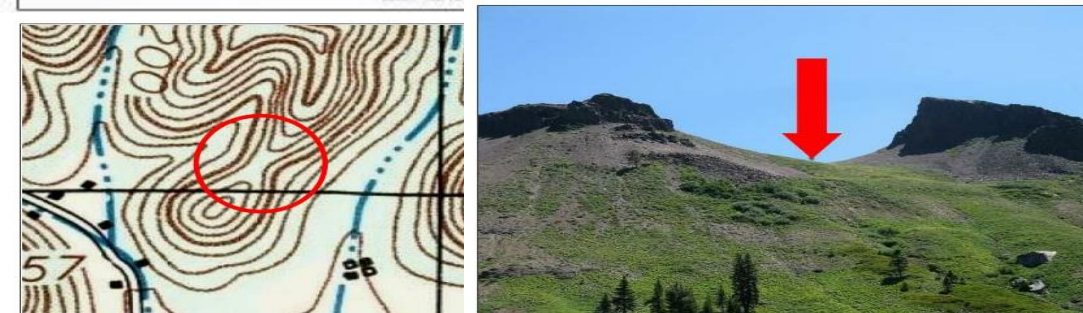




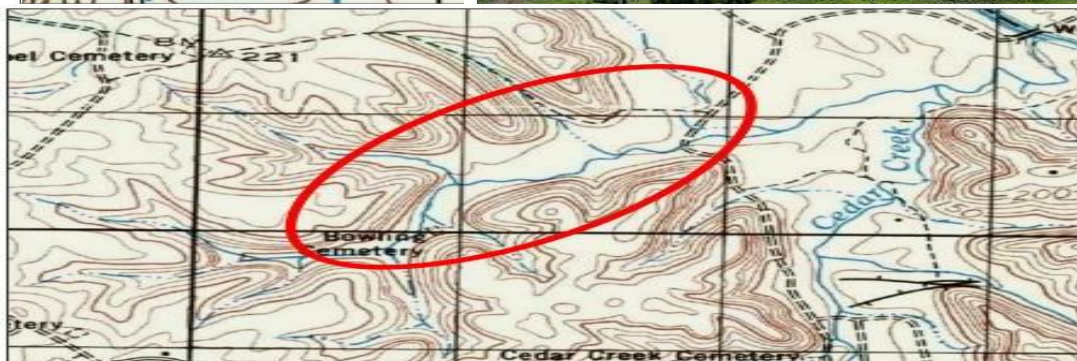
**SADDLE / PASS**



**SPUR**



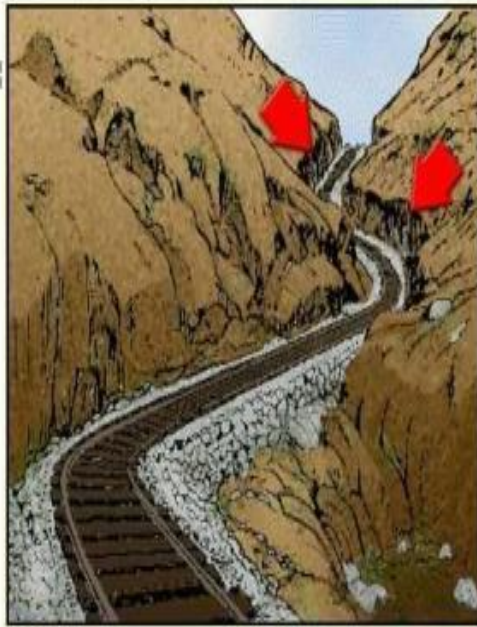
**SADDLE**



**GHATI**

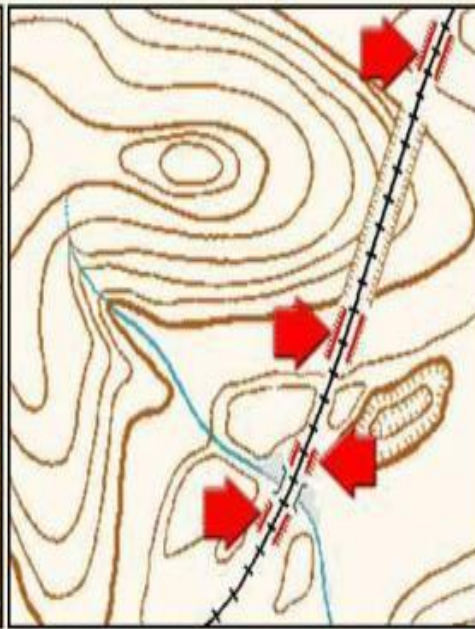
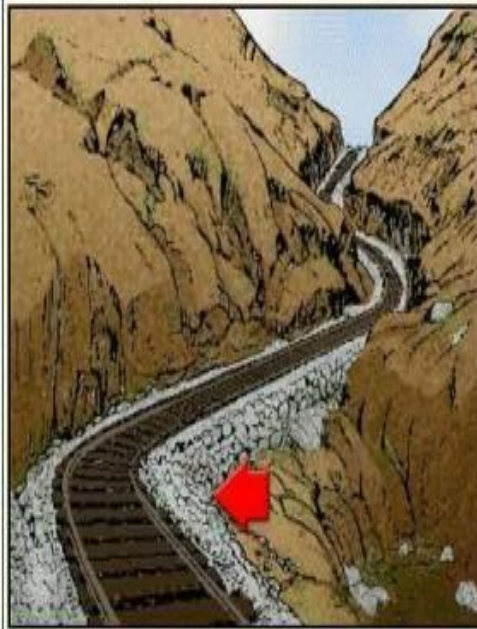


C  
U  
T



- PAHAR KO KAAAT KAR BANAYA HAI.
- CUT LINE ANDAR KI TARAF HAIN

F  
I  
L  
L



- GADDHON KO MITTE SE BHAR KE BANAYA HAI.
- CUT LINE BAHAR KI TARAF HAIN



# **PART-II**

# **TECHNICAL TERMS.**

# **TECHNICAL TERMS**

- **CONTOUR.** YEAH WHO LINE HAI JOKI UN JAGAH / POINTS KO JODTI HAI JINKI HEIGHT SAMUNDRA TAT SE SAMANTAR HAI. YEAH LINE JADA TAR BROWN COLOUR MEIN HOTI HAI. IN LINE KE SAATH KUCH NUMBER LIKHE HOTE HAIN JO KI US JAGAH KA SAMUNDAR SE UNCHHAI BATATE HAI .
- **CONTOUR INTERVAL.** YEAH DO CONTOUR LINE KE BICH KA HEIGHT KA FARAAQ HAI. CONTOUR INTERVAL ALAG PAHARI AUR ALAG MAP SCALE KE LIYE ALAG HOTA HAI.
  - 1: 50000 KE MAP PAR HAR 05 LINE GHERE COLOUR KI HOTI HAI JO KI CONTOUR INTERVAL DARSHATE HAIN.
  - CONTOUR LINE EK DUSARE KO CROSS NAHIN KARTI

# **TECHNICAL TERMS**

- **CONVENTIONAL SIGNS.** CONVENTIONAL SIGN US PRATEEK KA NAME HAI JO KI EK ZAMIN PAR PAYI GAI VASTU / MURAD / KO MAP PAR DARSHATI HAI.

YAH

JAB EK ZAMINI NISHAN KO MAP PAR EK CHINH KI MADAT SE MAP PAR DIKHAYA JATA HAI TOH USE CONVENTIONAL SIGH KEHTE HAIN

- **DATUM OR DATUM LEVEL.** WOH JAGAH JIS KO EK BASE RAKH KAR BAKI SAB ZAMINI NISHAN KA ALTITUDE YAH HEIGHT KO SAMUNDAR KE TAT SE NAPPA JAYTA HAI

# TECHNICAL TERMS.

- BEARING. YEAH WOH ANGLE HAI JO NORTH LINE AUR KISSI AUR LINE KE BICH BANTA HAI. YEAH GHADI KE CLOCKWISE RUKH MEIN PADA JATA HAI.
- BENCH MARK. YEAH EK BUILDING YAH BRIDGE KA SAMUNDAR SE UNNCHAI BATATA HAI. HEIGHT BUILDING YEAH BRIDGE PAR LIKH DIYA JATA HAI AUR HAWALE KE TAUR PAR ISTEMAL HOTA HAI.
- FORM LINES. YEAH EK APPROXIMATE CONTOUR HAI JISKA HEIGHT NAHIN LIKHA HOTA HAI. YEAH ZAMIN KI BANAWAT BATATA HAI
- GRADIENT. EK PAHARI KA DHALAN – CHADAI BATATA HAI.



1:10 = 1 unit up or down / 10 units across.

1:1 is a  $45^{\circ}$

Simplify to smallest fraction =  $\frac{20}{120} = \frac{1}{6} = 1:6$

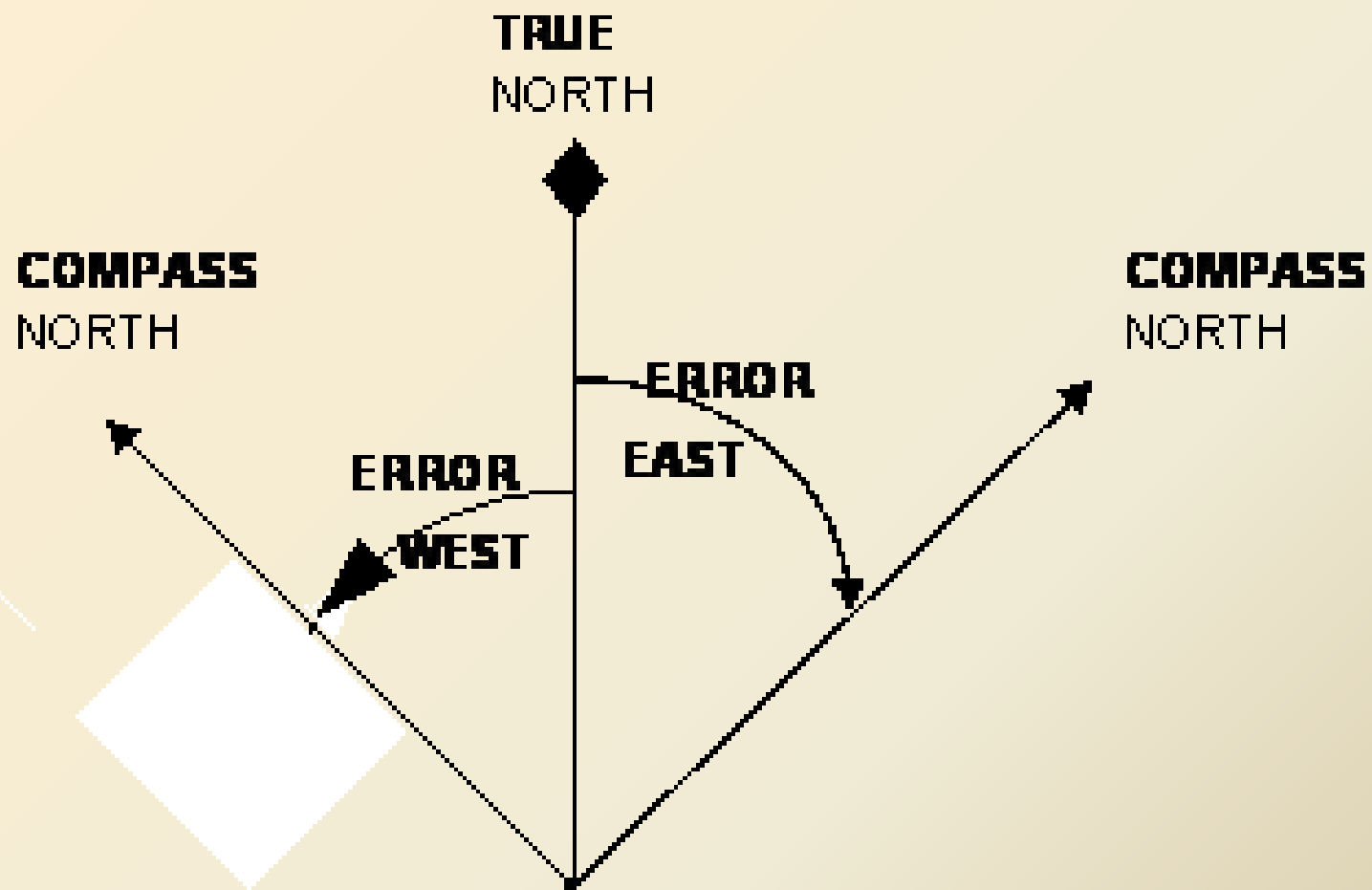


Developed by

..2 - Jan 05

# **TECHNICAL TERMS**

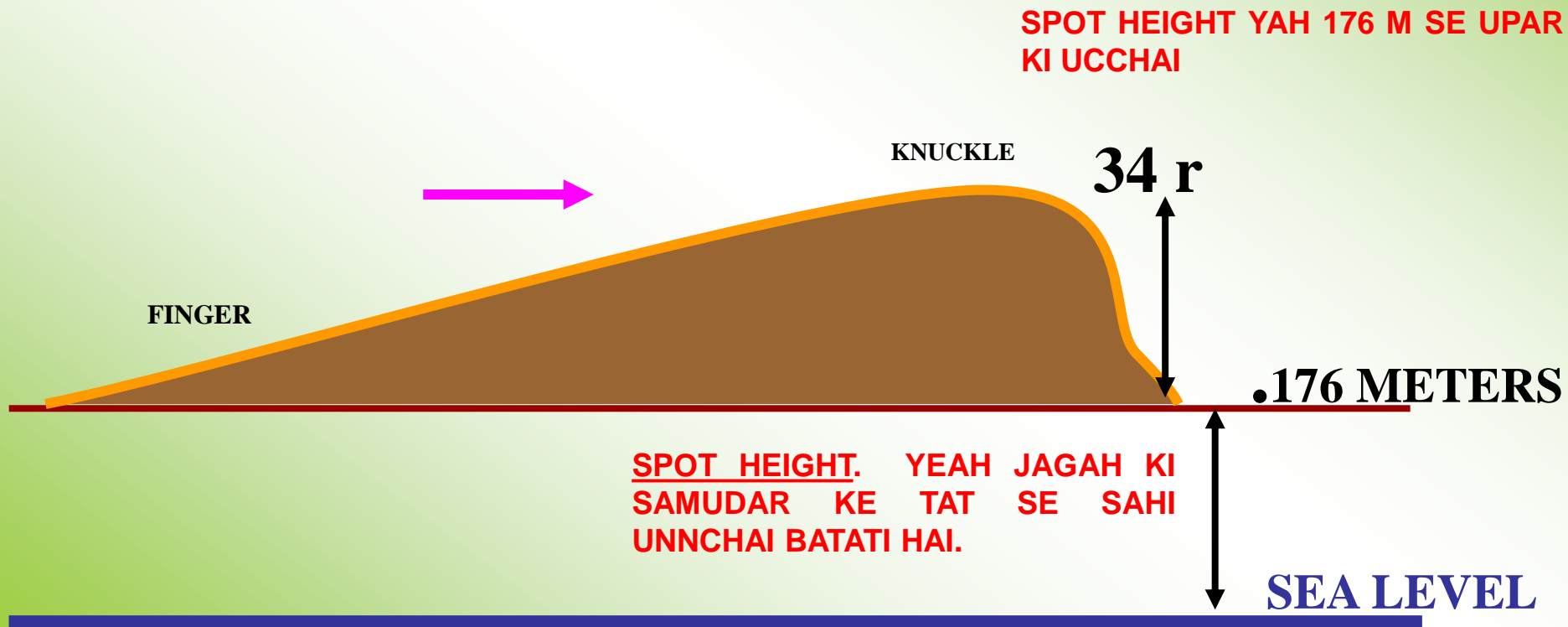
- **GRID.** YEAH MAP PAR RED LINES SE DIKHAI JATI HAIN. YEAH SAMANTAR LINES HAIN JO EAST SE WEST AUR NORTH SE SOUTH DAURITI HAIN. YEAH PURE MAP KO SQUARES MEIN BATTI HAIN
- **GRID NORTH.** GRID PAR KHADI LINES EASTINGS KEHLATI HAIN. YEAH LINES SAHI NORTH KO NAHIN DIKHATI. INKO GRID NORTH KEHTE HAIN.
- **MAGNETIC NORTH.** YEAH WHO NORTH HAI JISKO COMPASS KE NEEDLE POINT KARTI HAIN. YEAH POINT APNI JAGAH BADLTI REHTI HAI.
- **TRUE NORTH.** YEAH GEOGRAPHIC NORTH HAI AUR NORTH POLE KO DARSHATA HAI.
- **MAGNETIC VARIATION.** KYONKI MAGNETIC NORTH KA STHAN BADALTA REHTA HAI TOH TRUE NORTH AUR MAGNETIC NORTH MEIN EK FARQ REHTA HAI. ISSE MAGNETIC VARIATION KEHTE HAI.

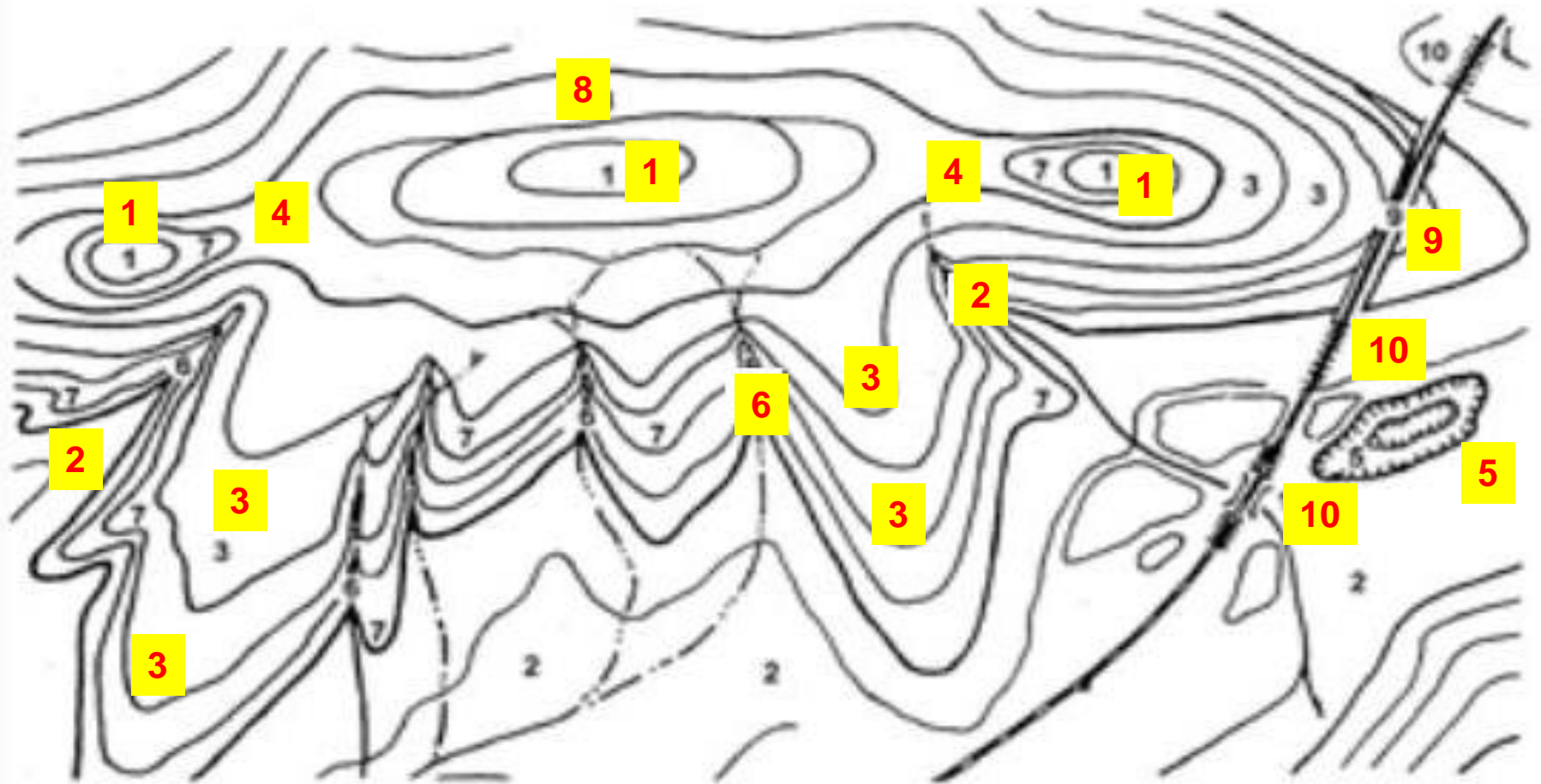


# TECHNICAL TERMS

- MAP KO SET KARNA ISME HUM MAP KO IS TARAH RAKTE HAIN KI MAP KA GRID NORTH ZAMIN KE NORTH SE MIL JAYE AUR MAP AUR ZAMIN PAR DIYE HUE ZAMINI NISHAN ALIGN HO JAYEN.
- SPOT HEIGHT. YEAH JAGAH KI SAMUDAR KE TAT SE SAHI UNNCHAI BATATI HAI. MAP PAR ISKO EK BINDU SE DARSHAYA JATA HAI. BINDU KE AGGE UNNCHAI LIKHI HOTI HAI. ISKO SURVEY SE NAPA JATA HAI.
- TRIG HEIGHT. YEAH EK TIKONE KE SAATH DARSHAI JATI HAI. TIKONE KE AAGE UNNCHAI LIKHI HOTI HAI. YEAH MAP PAR US JAGAH KI SAHI HEIGHT HAI AUR IS JAGAH KO SURVEY KE LIYE ISTEMAL KIYA JATA HAI.
- 
- RELATIVE HEIGHT (r). YEAH KISSI ASS PASS KE JAGAH JISKA NAP PATA HOTA HAI USKE UNCCHAI KA ANTAR BATATI HAI.

# SPOT HT AND RELATIVE HT





1. PAHARI	2. RE-ENTRANT	3. SPUR	4. SADDLE	5. GADDHA
6. NALE KI SHURUWAT	7. SPUR	8. CHATTAN	9. CUT	10. FILL



**ROAD**

**TRIG HEIGHT**

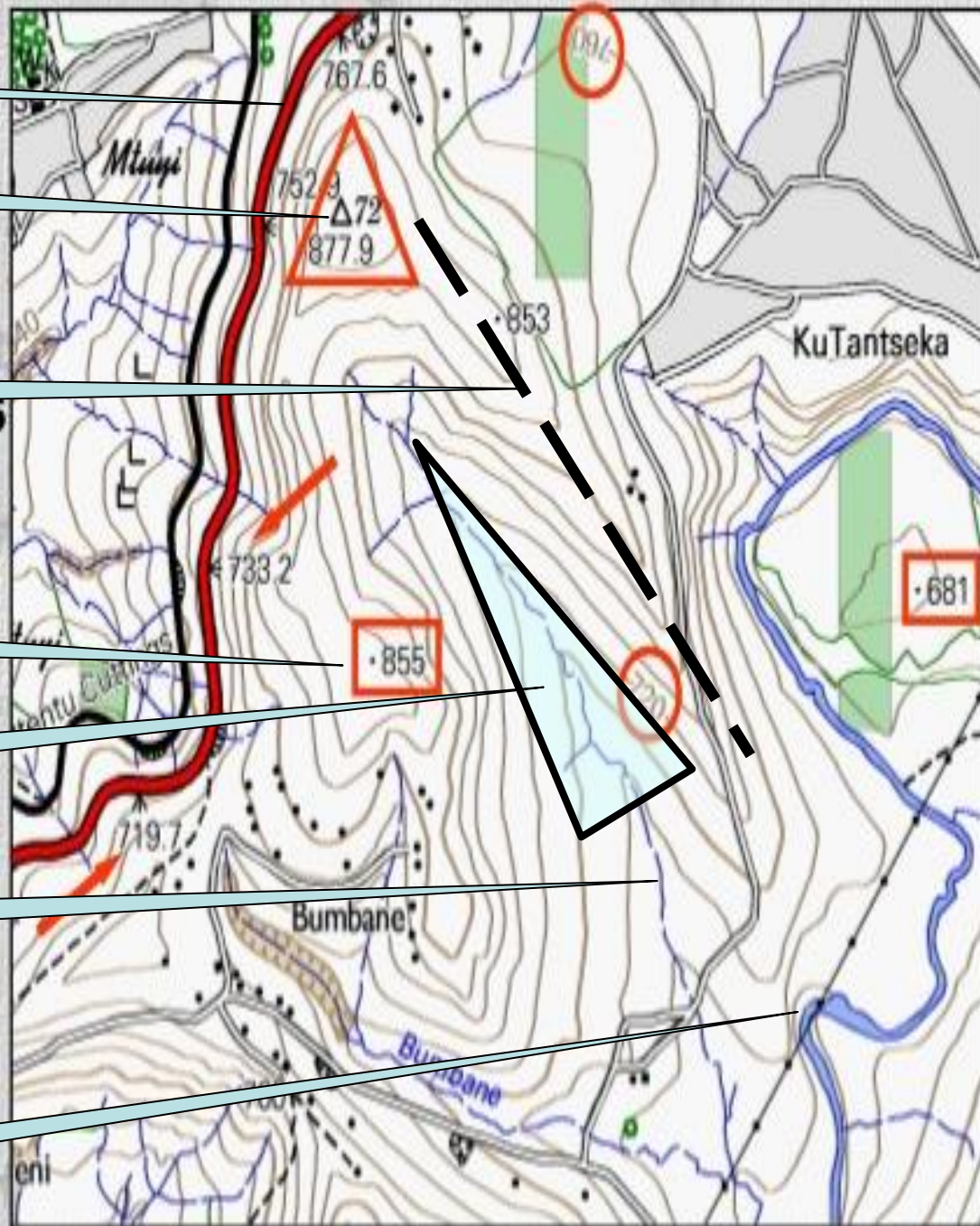
**SPUR**

**SPOT HEIGHT**

**RE-ENTRANT**

**NALA**

**NADI**



# **CONCLUSION**