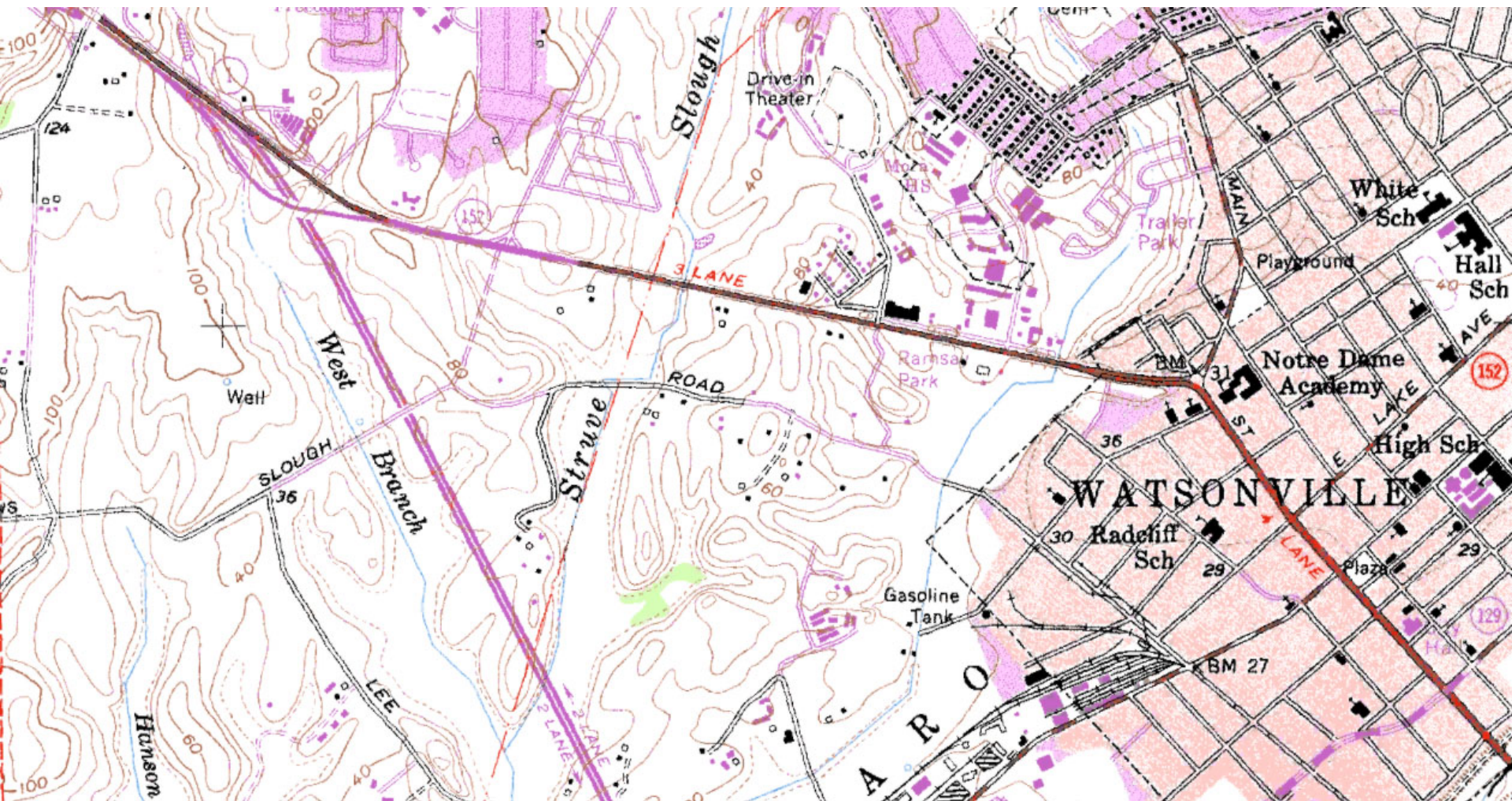


A detailed topographic map of a mountainous region, likely in the Andes. The map features numerous contour lines indicating elevation, with labels such as 4500, 4750, 5000, 5250, 5500, 5750, 6000, and 6250. Several lakes are depicted in blue, including Jahuacocha, Solteracocha, Gochacotan, Chaclan, Carhuacocha, Cangraanca, Ciulá (azulcocha), Quesillococha, Pucacocha, Azulo, Suerococha, and Sarapococha. Rivers and streams are shown as blue lines, with labels like Isococacca, Sacra, and Segya. A grid of coordinates is visible, with 290000 marked on the horizontal axis and 5250, 5500, 5750, 6000, and 6250 on the vertical axis. The text "Contour What?!" is overlaid in large, bold, black letters, and "How to read and understand topographic maps" is overlaid in smaller, bold, grey letters below it.

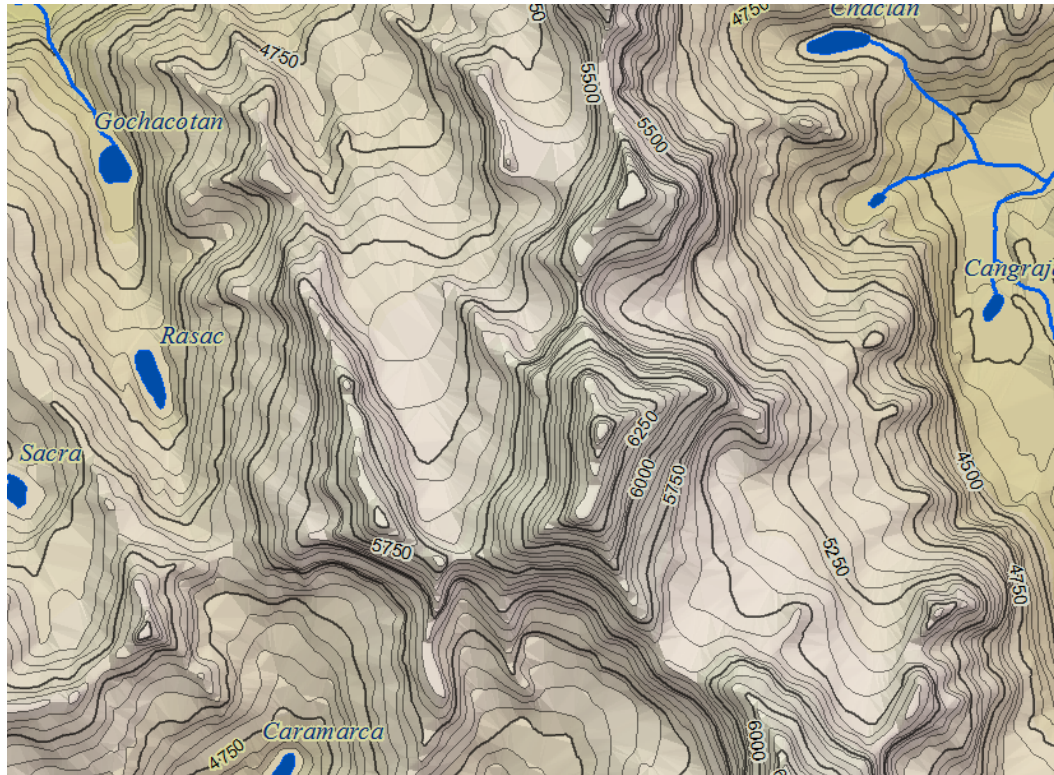
Contour What?!

How to read and understand
topographic maps

What is a topographic map?



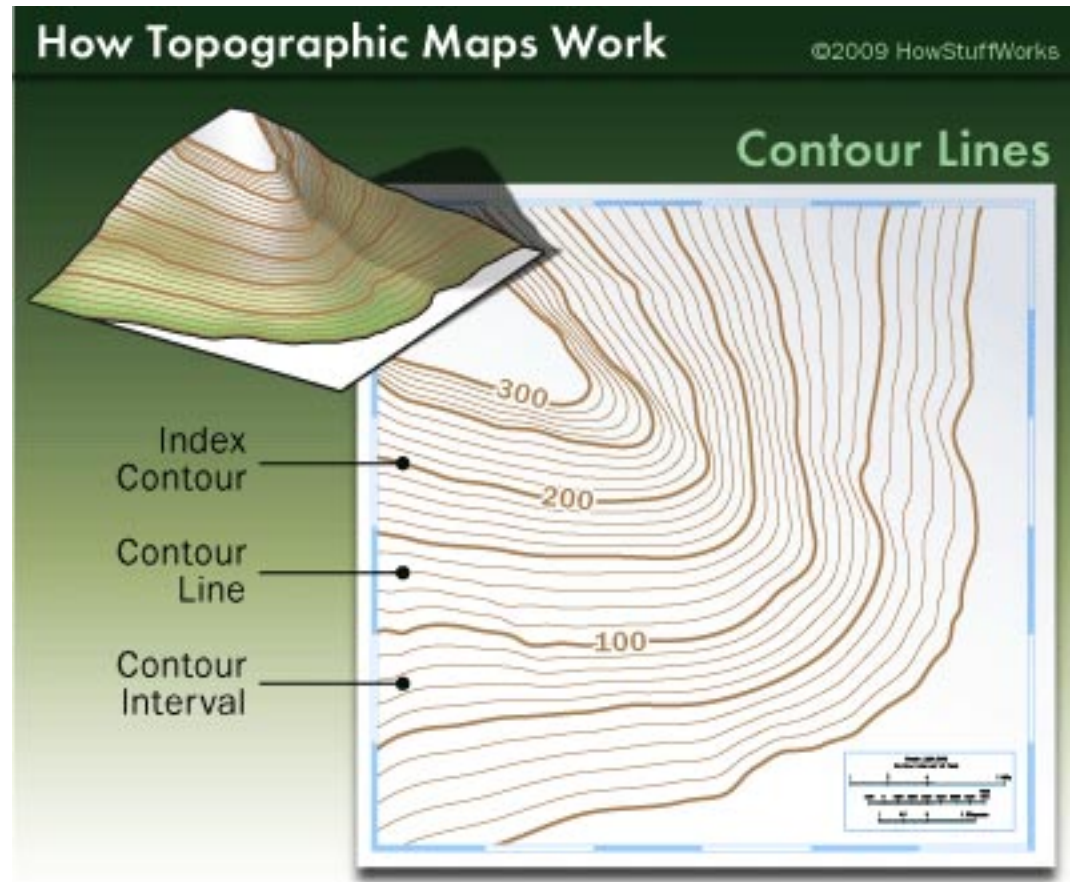
What is a topographic map?



- A topographic maps shows the shape of a landscape
- **Topography** = “shape of land”
- **Elevation** = height above sea level

What is a contour line?

Contour lines are continuous lines used on a topo map in order to show points of the same elevation



What is a contour?

Major/Index Contour line

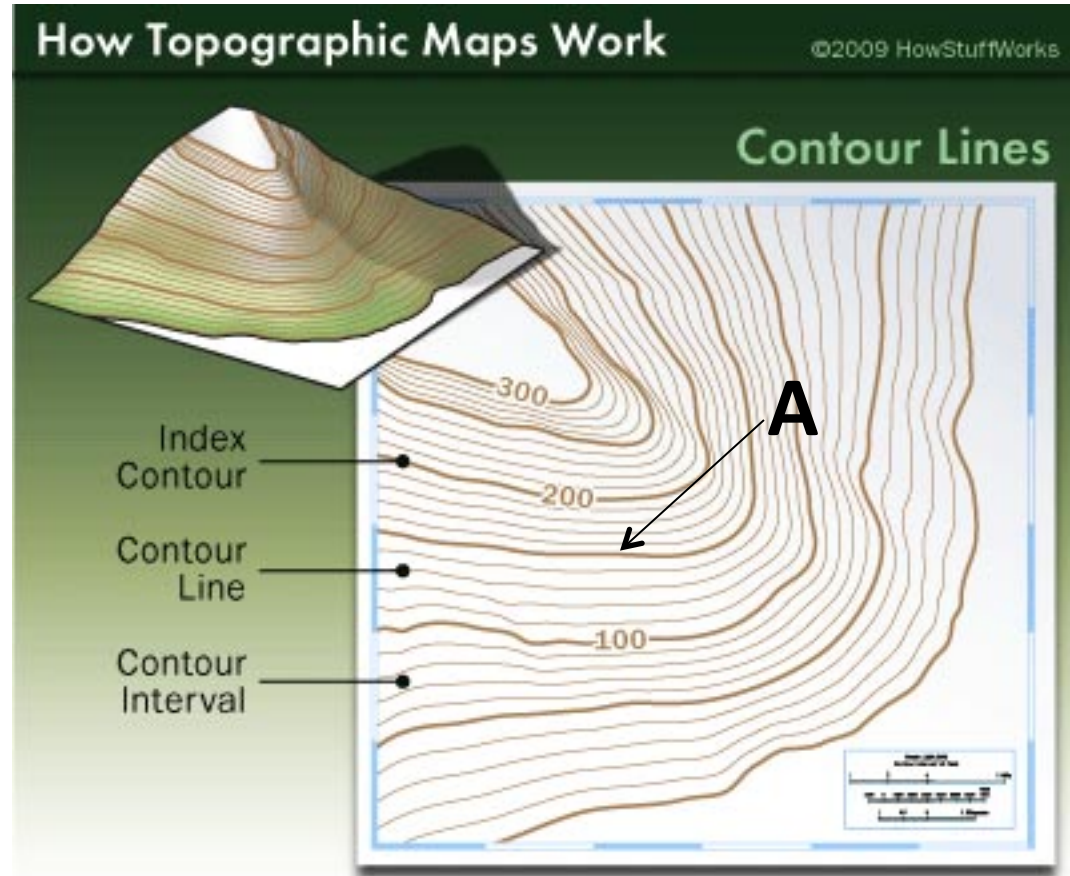
labeled with elevation
above sea level

Contour Interval

the elevation change
between any two contour
lines

What is the elevation on
point A on your map?

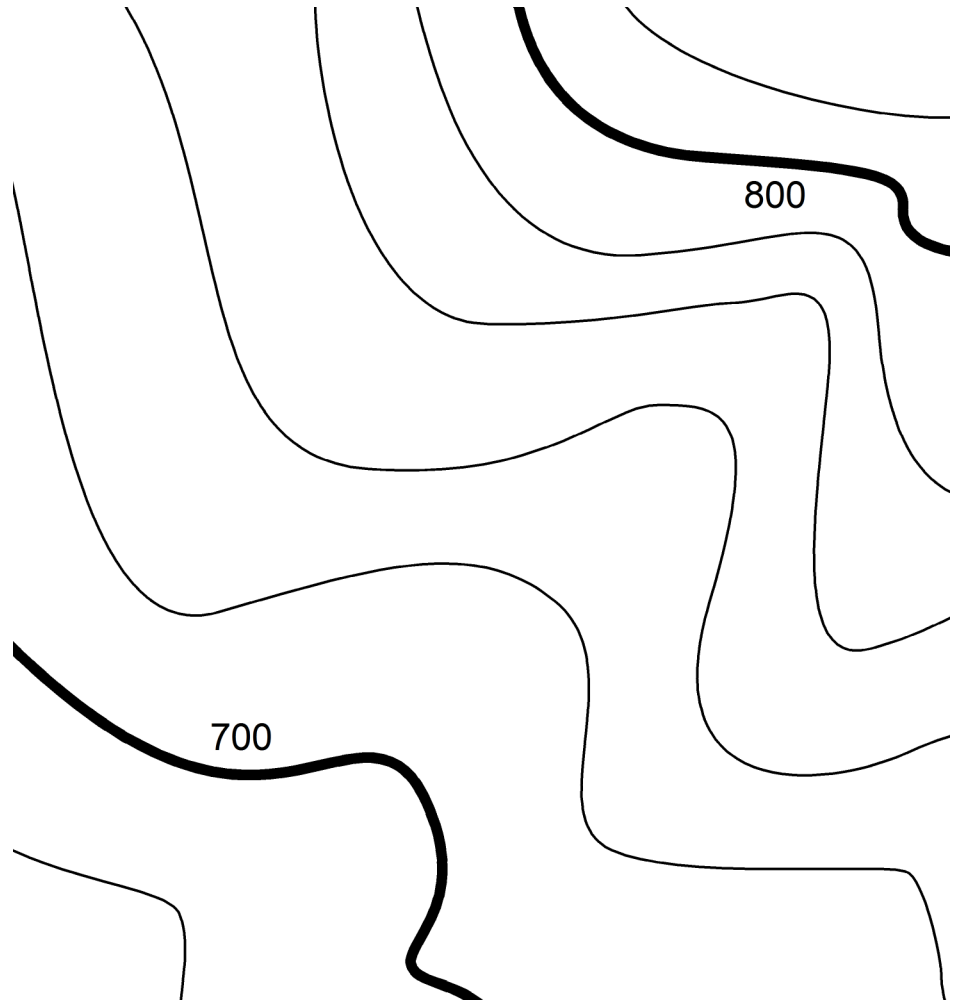
What is the contour interval
on this map?



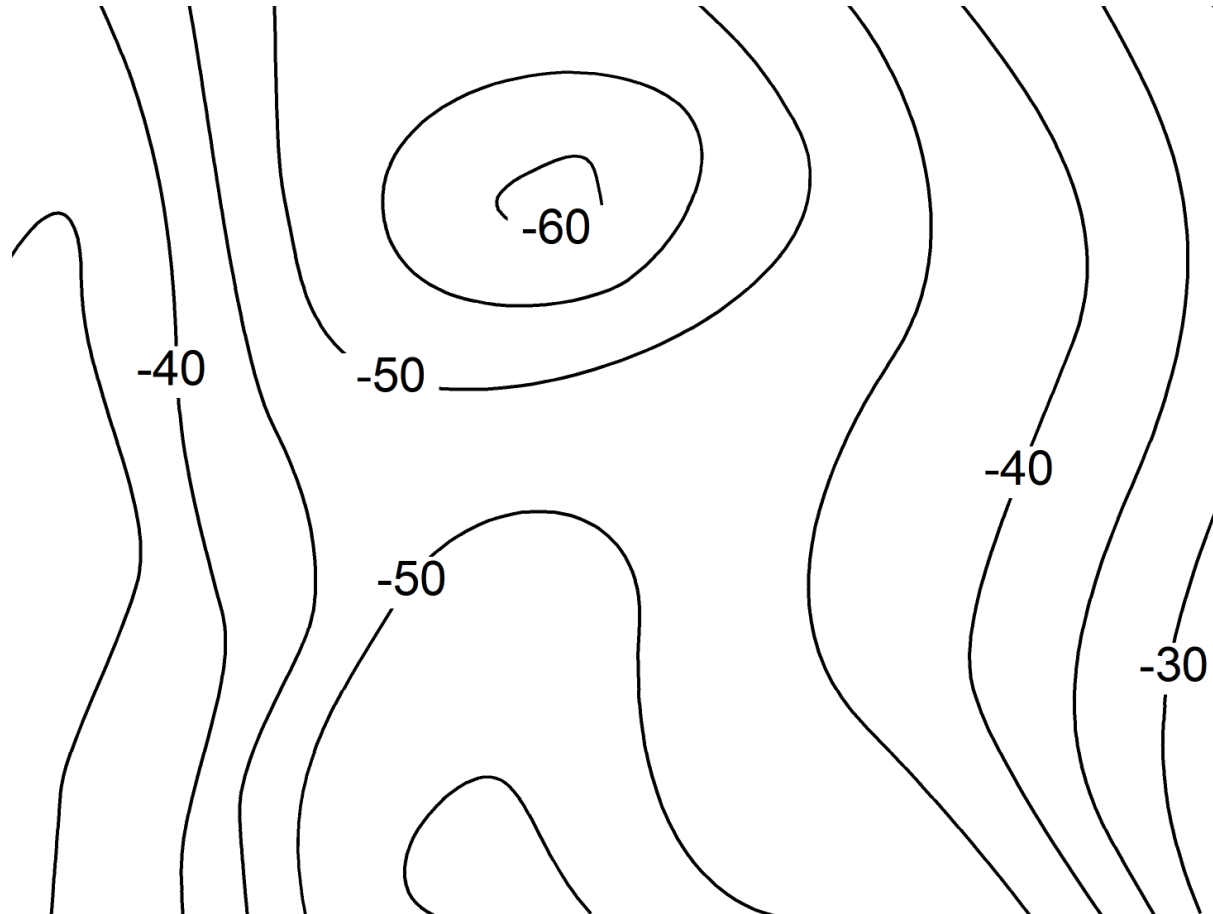
What is the contour interval?

Determine the contour interval for the following 4 topographical maps

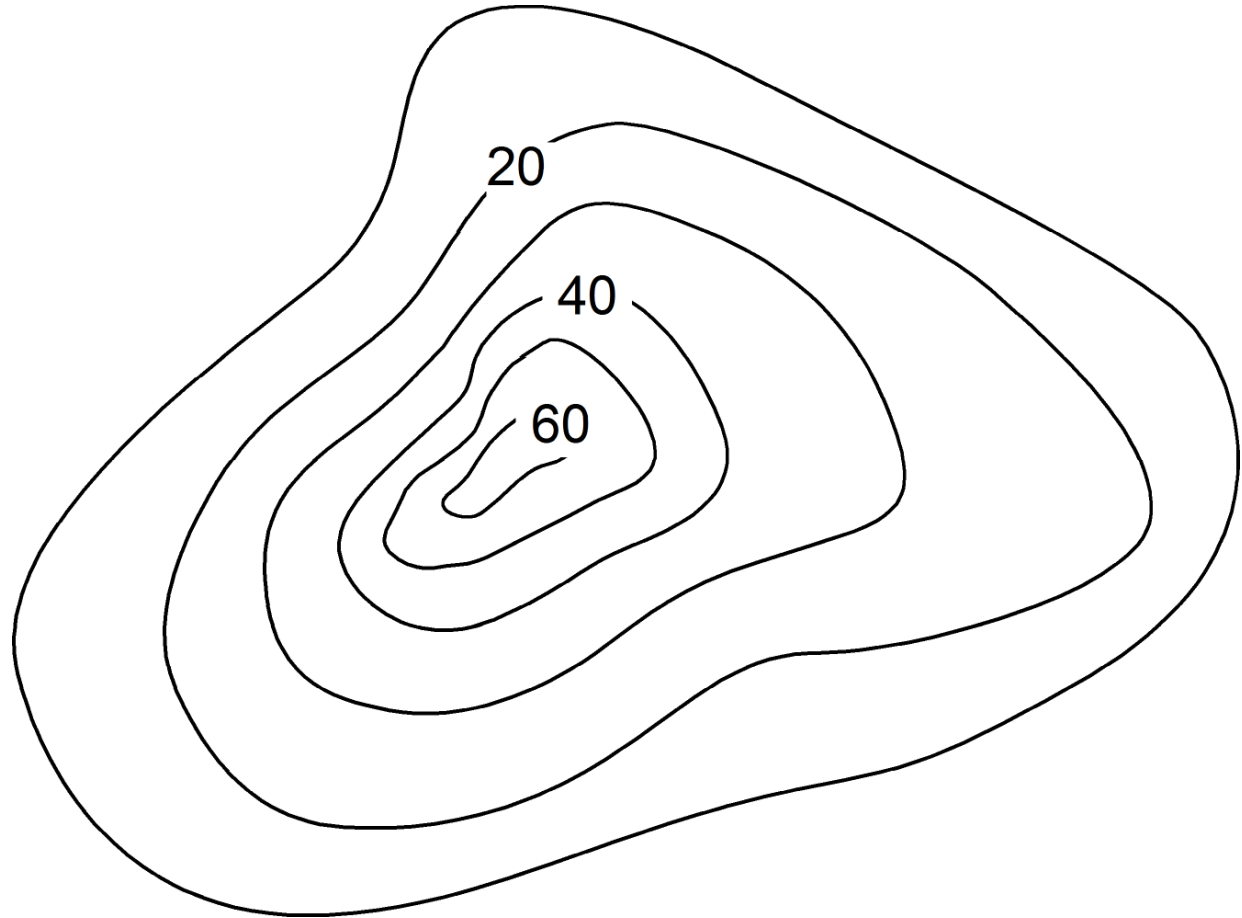
Map A



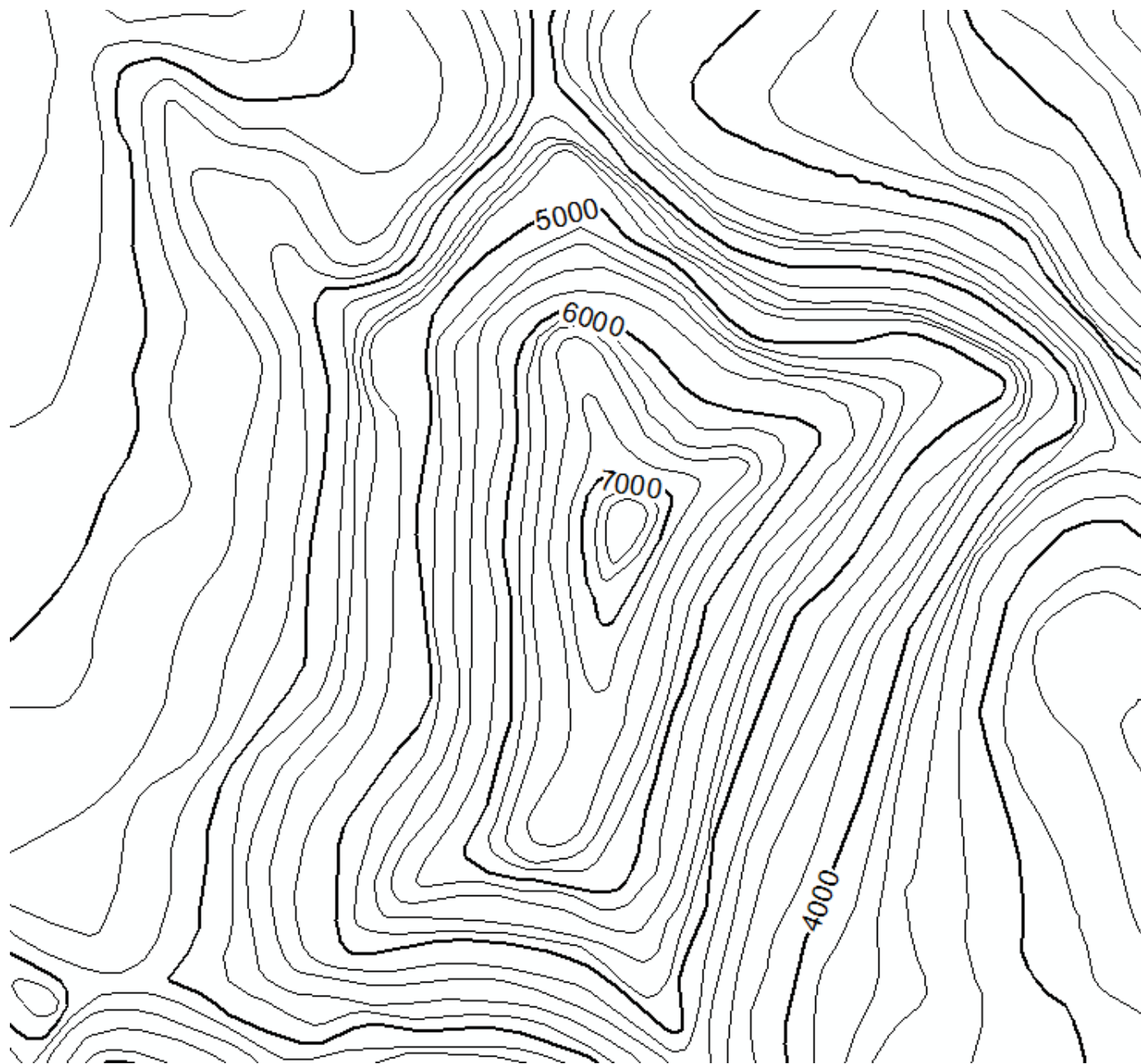
Map B



Map C



Map D



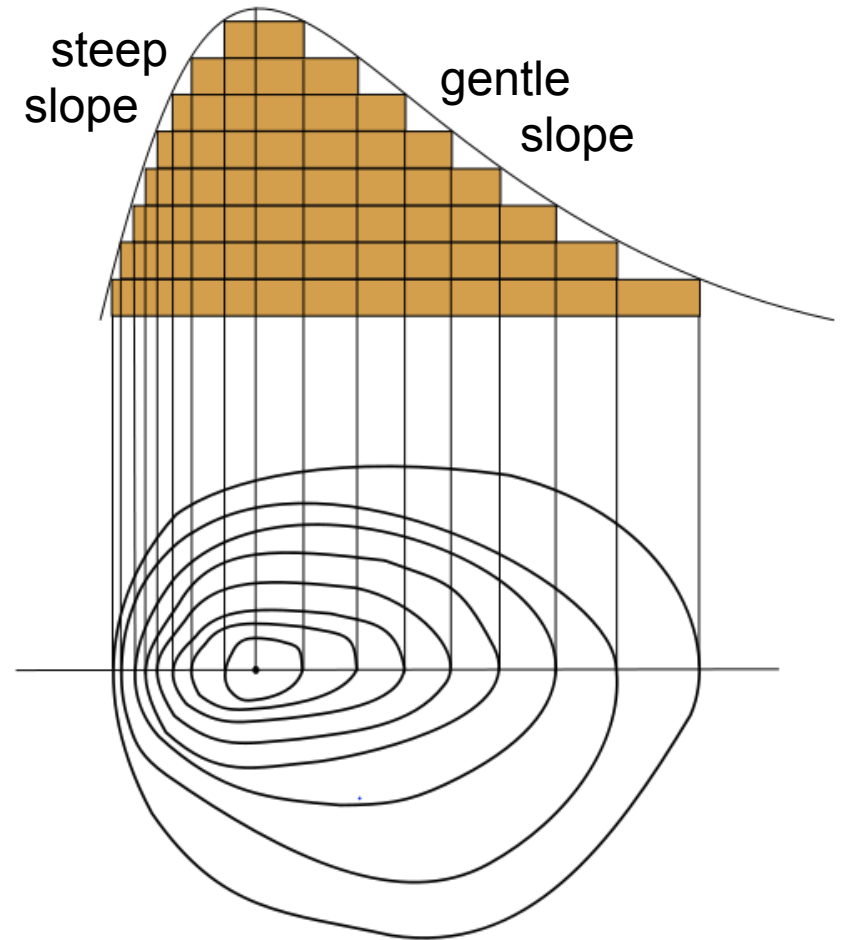
Identifying slope steepness

- What do you notice about the contour lines that represent the **steep** slope of the mountain?

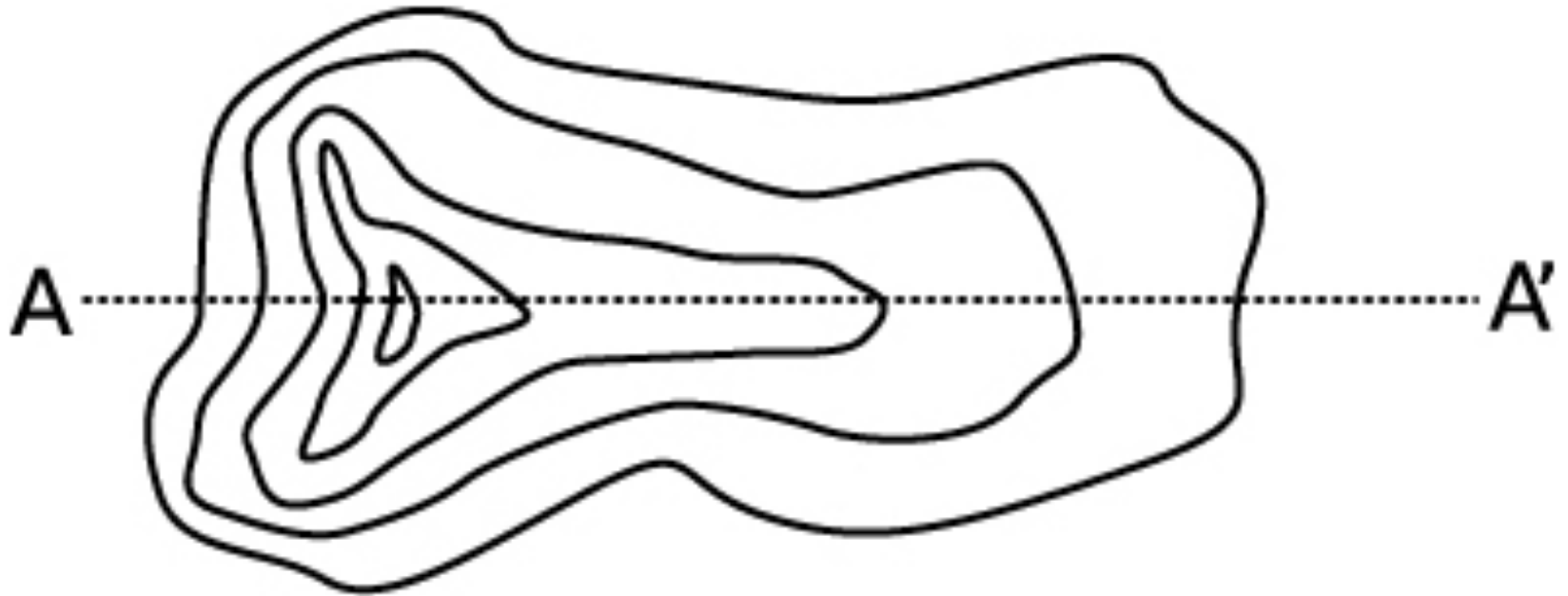
When the slope or angle of a mountain side increases, the *contour lines* are located *closer together*

- What about the **gentle** slopes?

When there is less slope or the slope is more gentle the *contour lines* are *further apart*

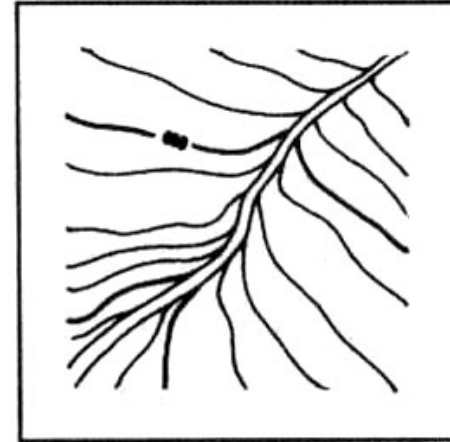
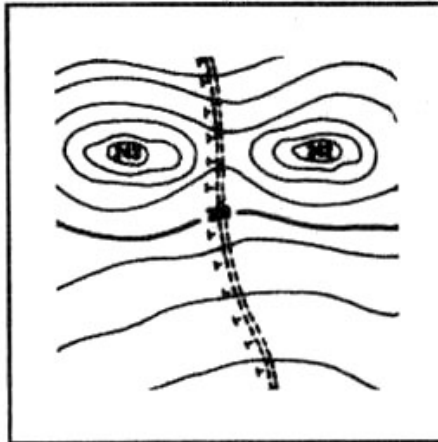
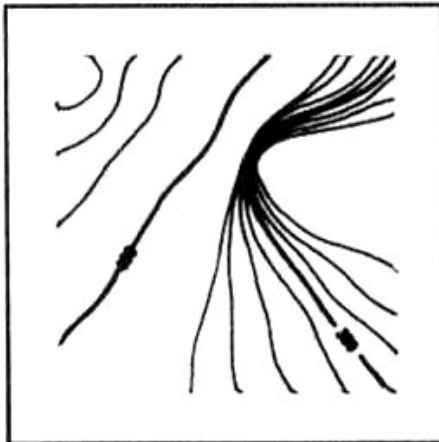
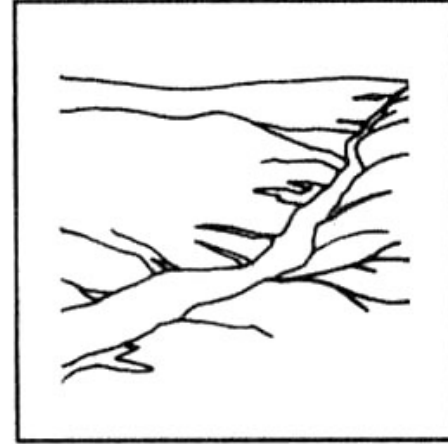


Activity: Identifying slope steepness



1. Draw the side view of the mountain represented by this contour map
2. Discuss with a partner; Which side has the most steep slope, and which side has the least steep slope

Identifying slope steepness

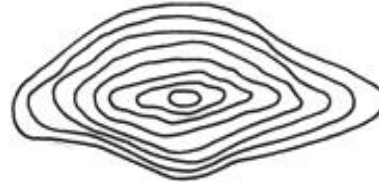


Activity: Contour This!

Match the numbered
contour maps with
its correct landscape
profile



1



2



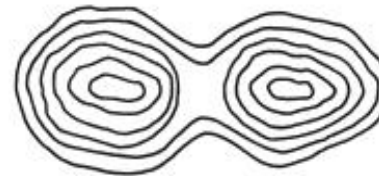
3



4



5



6



A



B



C



D

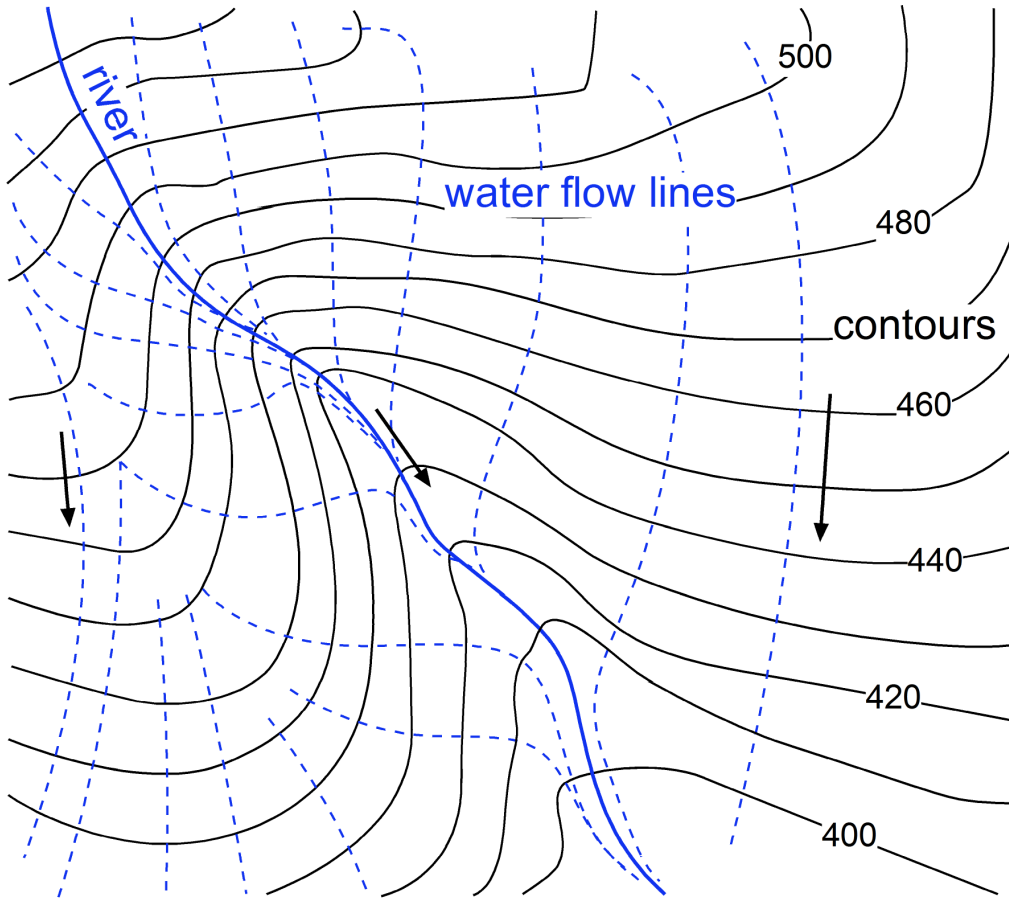


E



F

Direction of water flow



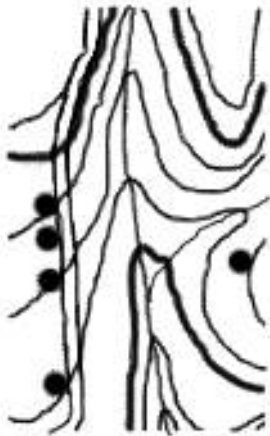
What do you observe about the contour lines regarding the flow of the water?

Water flows **perpendicular** to the contour lines

Rivers also flow downhill through the **concave** part of the contour

Contour this!

Which direction
does the river
flow?



- Where is the river?
- Which direction does the river flow?

