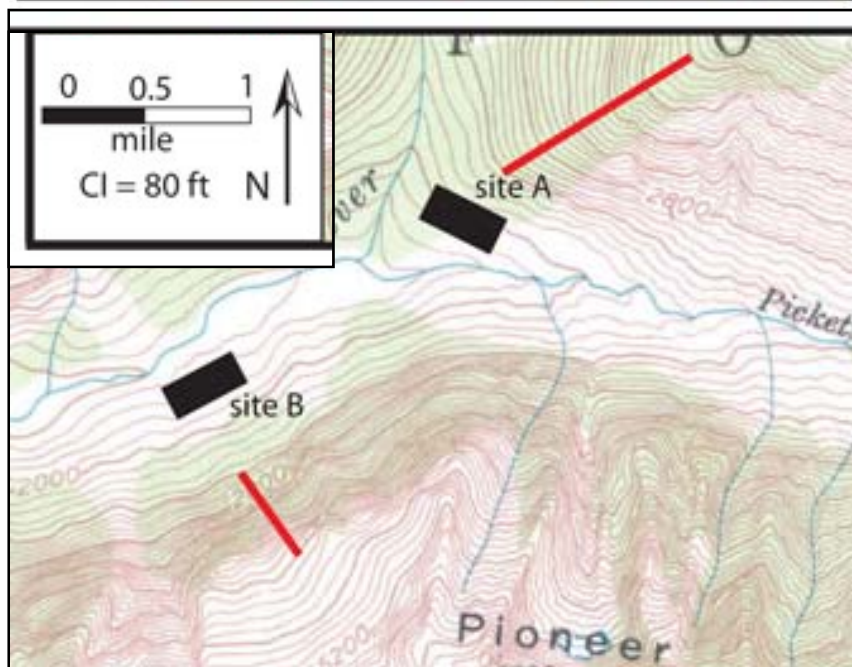
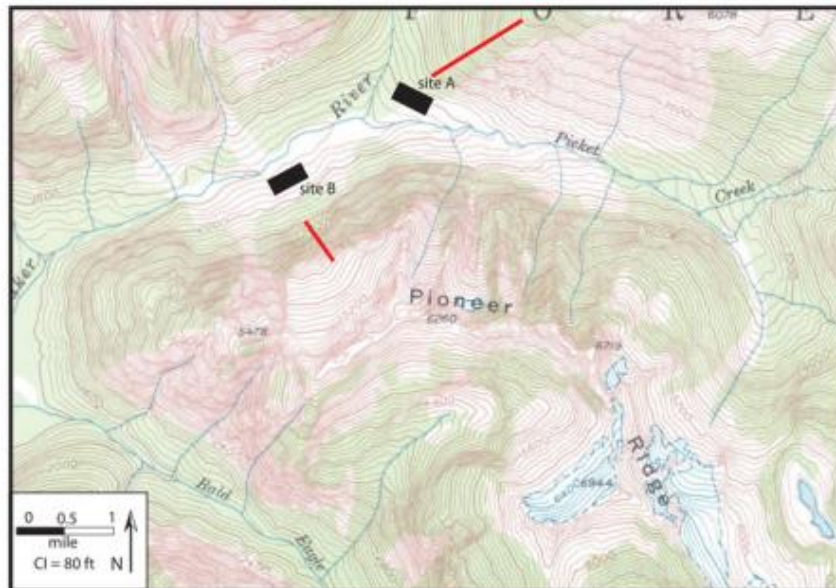


Calculating slope *Sample problems*

Avalanche hazards



You have recently purchased land around Pioneer Ridge (on the map above). You plan to build a ski resort and need to decide where to build your lodge. You have chosen two sites that have the aspects you want for your lodge (a view of the river and proximity to some nice steep (double diamond) slopes). You know that avalanches are most likely to happen on slopes that are 60-100%, so you need to know which of the sites will be less likely to be buried in an avalanche. Use the information on the map to calculate % slope and then decide which site is more realistic for your lodge.

Water Table

You are working in an area with an important aquifer that has been contaminated by a buried tank. You need to know the slope of the water table so that you can calculate how quickly the contaminants will get to the nearby wells. You measure the depth to water in two wells: Well A has water at 649 m elevation. Well B has water at 937 m elevation. The two wells are 0.7 km apart. What is the slope of the water table (in m/m)?