Reading a Topographic Map

When you look at a topographic map, what you’re seeing is an aerial view, or a view from above. When contour lines on the map are closer together, it means the elevation in that area is changing quickly. The land there is steep. When contour lines are farther apart, the elevation is changing more slowly. The land there is relatively flat.

**Topographic View of a Mountain**

Since the elevation change between contour lines on a topographic map is always the same, the elevation change along Trail X is the same as the elevation change along Trail Y.

**Profile View of a Mountain**

The incline, or slope, along Trail Y is greater than the incline along Trail X. So, if you walked along Trail Y, you would travel up a much steeper incline than along Trail X.

Because Trail Y is steeper than Trail X, you would walk over a longer horizontal distance along Trail X to climb the same 40 feet in elevation.