**MATH TUTORIAL**

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**SKILL: CREATING A LINE GRAPH**

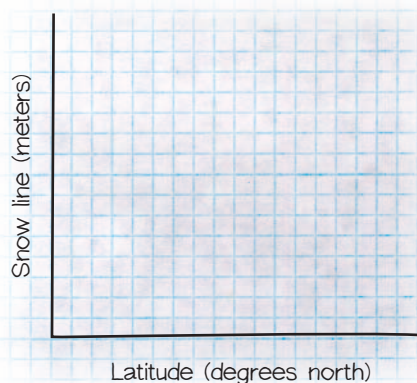
## Snow Line Elevation and Latitude

Glaciers form above the snow line, the lowest elevation at which there is permanent snow in the summer. The snow line elevation depends on temperature and precipitation. In the hot tropics the snow line is high in the mountains, while at the poles it is near sea level. The table shows the snow line elevations at different locations on Earth. The latitude of each location indicates how far the location is from the equator; the latitude of the equator is 0 degrees, and the latitude of the North Pole is 90 degrees.

Location	Latitude (degrees north)	Snow Line Elevation (meters)
North Pole	90	0
Juneau, Alaska	58	1050
Glacier National Park	49	2600
Sierra Nevada	37	3725
Himalayas (East Nepal)	28	5103
Ecuador	0	4788



Follow the steps below to make a line graph of the data.



- (1) On a sheet of graph paper, draw and label axes. Put latitude on the horizontal axis and snow line elevation on the vertical axis.
- (2) Choose and mark a scale for each axis.
- (3) Graph each point.
- (4) Draw line segments to connect the points.

Use your graph to answer the following questions.

1. Mount Kenya is very close to the equator. Estimate the snow line elevation on Mount Kenya.
2. Mount Rainier is at 47 degrees north latitude and is 4389 meters tall. Can there be glaciers on Mount Rainier? If so, estimate the elevation above which the glaciers form.
3. Mount Washington in New Hampshire is at 45 degrees north latitude and is 1917 meters tall. Can there be glaciers on Mount Washington? If so, estimate their lowest elevation.

**CHALLENGE** Temperatures are hotter at the equator than at 28 degrees north latitude. Why is the snow line lower at the equator in Ecuador? (**Hint:** The answer involves precipitation.)