

Unless otherwise noted the following assumptions can be made:
Each challenge heading is based on a separate scenario.
Compass bearings are based on true north using the map's printed declination.
GPS coordinates are based on WGS84 and listed in UTM.

Map Interpretation: (Use Map "2010, 01 Winter Refuge B" and 2010,01 Map Interpretation Photo)

From the campsite labeled on the map you and your group awoke early and summited Tokewanna Peak by hiking up its north east ridge. You are now on your way back to camp and your group wants to know how much further it is to camp. Using just your map interpretation skills, with the attached map interpretation photo, determine your current location. Also measure your distance back to camp along the most likely hiking route.

Compass Skills: (Use the 2010,01 Winter Refuge map)

You left the trail at point B, in the north west section of the map, and have been hiking south east towards the campsite marked. You are curious about your progress and decide to triangulate your current location. Using the following landmarks and bearings triangulate your position:

Landmark #1 = High point with an elevation of 11363'; Bearing = 206°

Landmark #2 = High point with an elevation of 11364'; Bearing = 117°

Navigation Logistics:

You and your group of three friends are traveling off trail from the north east section of your map 2010,01 Winter Refuge. You have been traveling in a southerly direction and are now at Point A. The weather has been getting increasingly poor and now visibility has been limited to about 100 feet (30 meters). You and your group feel that the weather, although poor, is not dangerous and decide to continue on towards the campsite. From Point A plan your trip in as few legs as possible. Your trip plan should contain bearings, distances, and travel time for each leg; include any appropriate catching features.

GPS:

Using the scenario above, under Navigation Logistics, plan your trip using a GPS in as few legs as possible. Your trip plan should contain GPS waypoints, distances and travel time for each leg (include the GPS coordinates for Point A and the campsite).

Email us for a free PDF of answers. You can also order a complete explanation of how to arrive at these answers through the order page on our website.