

Olympia Mountaineers Navigation Pre-Workshop Homework

Your name: _____

Complete this assignment **before** the first workshop on April 16. **Bring it to the workshop.**

The goal of this homework is to test your understanding of the contents of “Wilderness Navigation” by Burns and Burns or “Freedom of the Hills,” 9th edition, chapter 5.

1. What kind of map is most useful for wilderness travel?
 - a. Political
 - b. Recreation
 - c. Topographic
 - d. Road
2. What scale of map is more useful for wilderness travel: 1:24,000 or 1:100,000?
3. The four cardinal directions are north, east, south, and west. What are the degrees marked on a compass for each of them:
 - a. North _____
 - b. East _____
 - c. South _____
 - d. West _____
4. According to the map in the book, what is the approximate magnetic declination adjustment needed for your compass here in South Sound? _____
5. The best means of keeping track of where you are on a trip is combining what **two** things?
 - a. Orienting your map
 - b. Knowing direction of the slope
 - c. Knowing your line position
 - d. Continual observations of surroundings
 - e. Review of your map
6. What is the technique to use when you know the bearing to a point and wish to compensate for any error you might make in your course (so you don't miss the end of the road, for instance)?
 - a. Intermediate objective
 - b. Compass only
 - c. Intentional offset
 - d. Routing around an obstruction
7. What is the **first** thing to do if you realize that you may be lost?
 - a. Study the terrain
 - b. Keep your wits
 - c. Try to determine where you are
 - d. Stop
 - e. Study the map

Olympia Mountaineers

Navigation Pre-Workshop Homework

8. What things should you do before the trip, to prepare:
 - a. Identify handrails
 - b. Identify baselines
 - c. Prepare a route plan
 - d. All of the above

9. You cannot rely on old maps for declination adjustment because:
 - a. The units of declination have changed
 - b. Old maps don't show declination values
 - c. Declination changes over time
 - d. None of the above – you can rely on old maps for declination adjustment

10. Because they are affected by changes in the weather, altimeters are not useful in navigation.
 - a. True
 - b. False

11. If you have a GPS, you don't need to know how to use a map and compass.
 - a. True
 - b. False

Use the map at the end, taken from the USGS Mt Rainier East, for the following questions:

12. Name the general topographic features at the following points:

A _____
B _____
C _____
D _____
E _____

13. What are the elevations at each of the following points:

F _____
G _____
H _____
I _____
K _____

14. What is the straight line distance, in miles, between points L and M? _____

15. What is the distance along the road, in miles, between points L and M? _____

16. What is the bearing from point A to M? _____

Olympia Mountaineers
Navigation Pre-Workshop Homework

