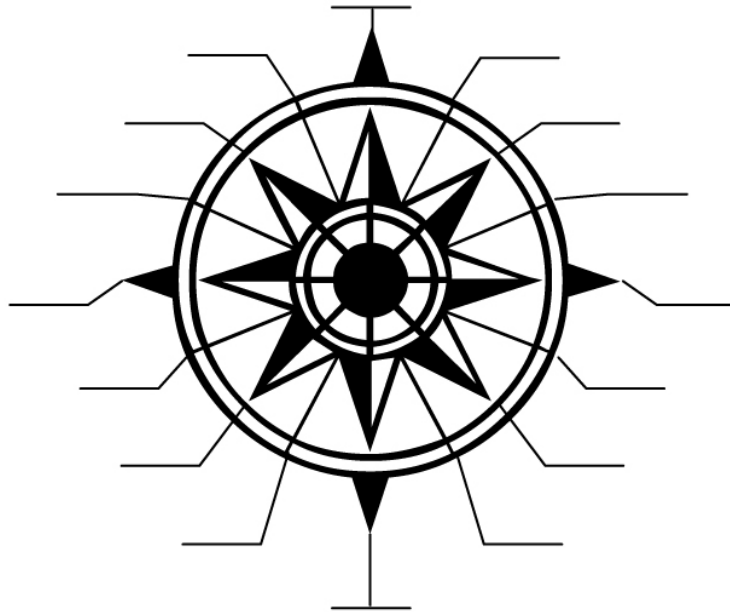


## **GEOG 201. Map Interpretation & GPS**

### **Exercise 03. Compass basics**

#### **Azimuth**

Fill in the missing azimuth designations below.



#### **Pacing**

Measuring long distances in the field is not easy. Knowing your pacing distance will allow you to have a pretty good idea of how far you've gone without having to stretch a tape measure over rocky terrain.

1. Walk at a normal pace for a distance of 100 feet. Count every other step.
2. Write down the number you counted here. \_\_\_\_\_
3. Do it again. Write the number here. \_\_\_\_\_
4. Do it one more time. Write the number here. \_\_\_\_\_
5. Take the average. Your pace is \_\_\_\_\_ paces per 100ft
6. Now divide 100ft/\_\_\_\_\_ paces. Your pace is \_\_\_\_\_ ft/pace

## Declination

One way to check for magnetic declination is to compare a linear feature on the map with its magnetic azimuth.

7. Using your campus map find a linear feature running north-south.
8. Find the magnetic azimuth for that same feature with your compass. If the azimuth is to the west of north subtract that number from 360. If your azimuth is to the east of north, simply write down that number. Be sure to add the direction to your declination.
9. The declination on campus is \_\_\_\_\_.

## Practicing with the compass

Using a compass with confidence simply takes practice. Keep working with it until you no longer doubt your readings.

10. Find an object on campus that you can shoot an azimuth for. Write it here \_\_\_\_\_
11. Now walk to the object and shoot an azimuth back to where you were first standing. Write that new azimuth here \_\_\_\_\_.
12. Subtract the two numbers \_\_\_\_\_. If you are using the compass properly, you should get a difference of 180.
13. Repeat this with four more objects
  - a. Azimuth \_\_\_\_\_, Back azimuth \_\_\_\_\_, Difference \_\_\_\_\_
  - b. Azimuth \_\_\_\_\_, Back azimuth \_\_\_\_\_, Difference \_\_\_\_\_
  - c. Azimuth \_\_\_\_\_, Back azimuth \_\_\_\_\_, Difference \_\_\_\_\_
  - d. Azimuth \_\_\_\_\_, Back azimuth \_\_\_\_\_, Difference \_\_\_\_\_