

FOR 274 Assignment 2: Pacing & Compass Skills [40 points]

This assignment should be completed and handed in at the beginning of the lab on Sept 24/25.

1. Assuming that you have 3 ½ feet in a pace calculate the following horizontal distances to the nearest foot [4 points]:

a. A flat distance between of 32 paces?

b. A flat distance between of 27 paces?

c. The horizontal distance when the distance on a slope of 30° is 11 paces?

d. The horizontal distance when the distance on a slope of 60° is 39 paces?

2. If a compass dial in an area of Declination 16W reads 20°, calculate the reading that you would get if your area had a Declination of [3 points]:

a. 16 E

b. 21E

c. 9W

3. If a compass dial in an area of Declination 9E reads 15°, calculate the reading that you would get if your area had a Declination of [3 points]:

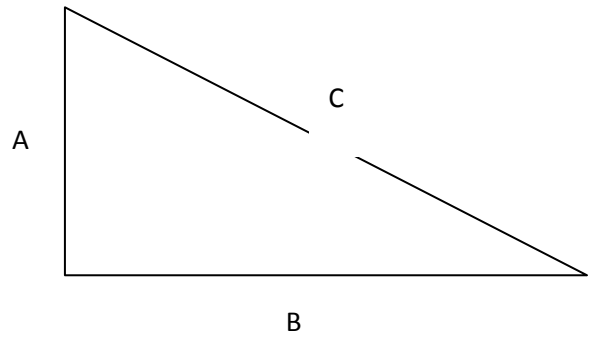
a. 2E

b. 6W

c. 19E

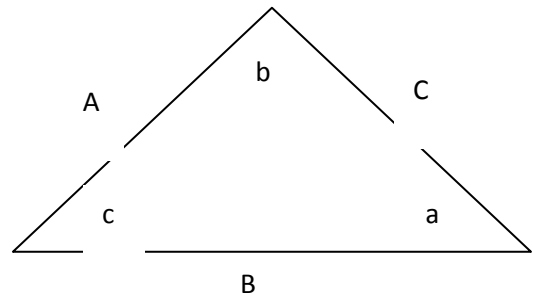
4. Refer to the following figures to complete the following tables (assume a right angle triangle):

A	B	C
10	20	
	50	60
10		45
30	60	



[5 points]

a	b	c	A	B	C
60	50		100		
50	100			150	
60		60			50



[5 points]

5. From the information below calculate the following (6 points):

7	13	8
10	12	10
9	10	7

i: Determine the mean

ii. Determine the median

iii. Determine the mode

Refer to Map Resource 1 (from the website) and answer the following questions:

6. What are the Bearings and Horizontal Distances between (4 points):

(i) Site A and Site B

(ii) Site A and Site C

7. Calculate the bearings and distances you would use to triangulate to the small lake beneath the word “Big” at the top of Big Meadow Creek from (2 points):

(i) Site A and Site D

(ii) Site B and Site C

8. Calculate the Elevation difference and horizontal distance between these two map features (4 points):

1. The small lake shown under the word “Big” at the top of Big Meadow Creek.
2. Beulah Cemetery

9. What is the Bearing from the Lake to the Cemetery? (2 points)

10. What is the bearing from the Cemetery to the “S” of Spring Hill Reservoir? (2 points)