

CA1 2.6: Understanding Azimuth Handout

Purpose: to practice understanding of azimuth.

Homework: Azimuth Angles from your house

- a. Draw a sketch of your house or apartment building seen from above, and indicate which way is north. Include nearby streets your teacher is likely to know.
- b. Pick several objects near your house or apartment and give azimuth directions to them. For example, you could say “The big maple tree is south by southeast. The mailbox is due east. Our apartment building’s laundry is northwest.” Do at least 5 objects.
- c. What is the approximate direction of the school from your house? Use cardinal directions.
- d. From the school, which way is the nearest movie theatre? Use cardinal directions.
- e. From the school’s flagpole, what direction is your classroom for this class? Use azimuth angles. An answer must be within 20 degrees to be counted correct.
- f. Draw a “treasure map” leading from your house to a park. Give directions strictly in terms of orienteering (go 3 blocks east, drive 1 mile south, etc.)
- g. Make a table of all 16 cardinal directions and list the corresponding azimuth angle for each. Hint: Azimuth angles go from 0 to 360. Once you see how many degrees one direction is from the next, you will find they are all equally spaced like the slices of a pizza. (North = 0, North by northeast = 22.5, northeast = 45, east by northeast = 67.5, east = 90, east by southeast = 112.5, southeast = 135, south by southeast = 157.5, etc.)[finish and put in table form]

North	0
North by Northeast	
Northeast	
East by Northeast	
East	90
East by Southeast	
Southeast	
South by Southeast	
South	180
South by Southwest	
Southwest	
West by Southwest	
West	270
West by Northwest	
Northwest	
North by Northwest	

Print Name _____ Period _____ Date _____

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- h. You will next make an official observation for your observing notebook. Note the azimuth of the setting sun from your house. In your observing notebook, record where you were standing, the exact clock time, and whether or not there were obstructions such as trees that prevented you from seeing the sun on the horizon. You must make an observation—but it is OK if you estimate or use the time when the sun disappears behind a building. Use your azimuth circle and point it north for this observation.