Station 1:

1.)Finish the sentence: The altitude of Polaris equals one's _____, but only in the _____ hemisphere.

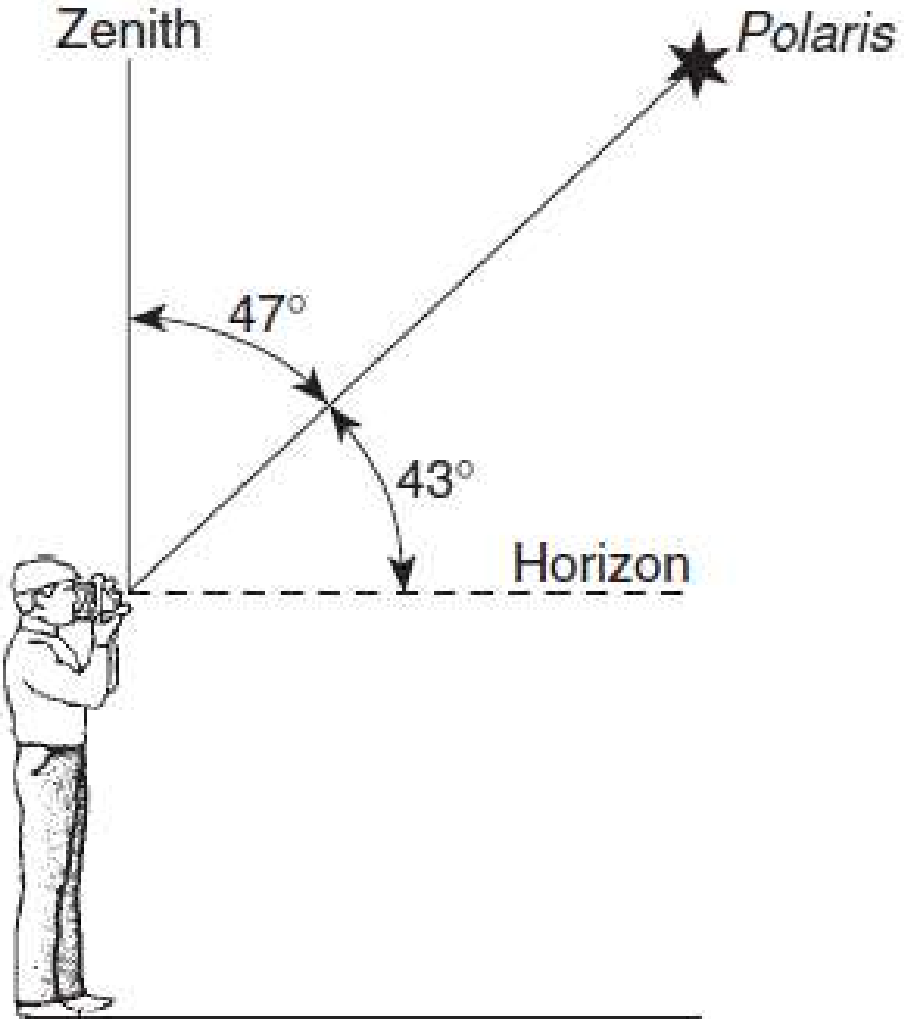
2.)What is the observer's latitude in the diagram below?

3.)List 4 NYS cities in which this observer could be located (use pg. 3 of your ESRT!)

4.)Where is the only place on Earth that Polaris is located at the *zenith*?

5.)Where is the only place on Earth that Polaris is located on the horizon?

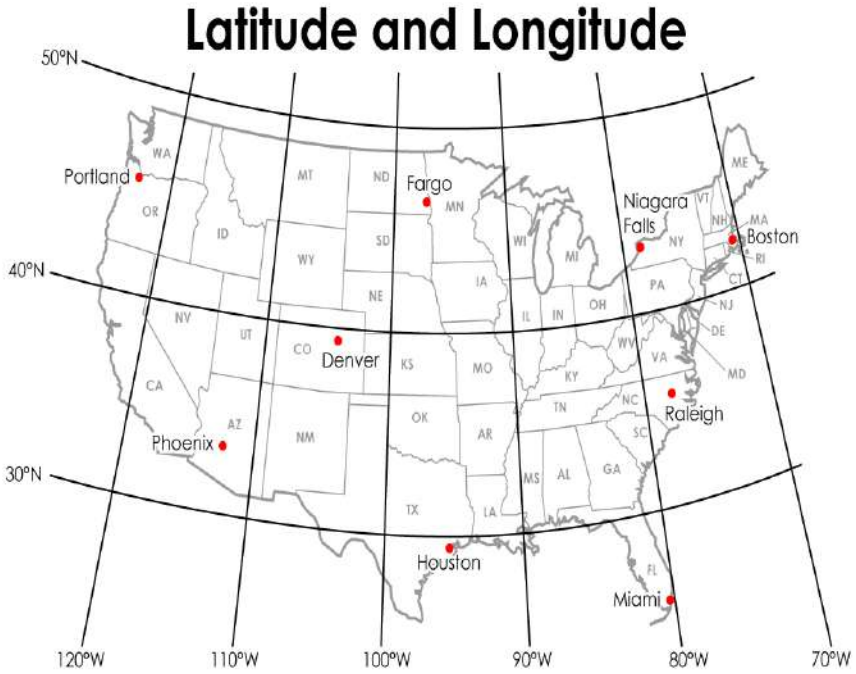
6.)The fact that the altitude of Polaris changes with latitude provides evidence that the earth is _____.



1.) Latitude, Northern
2.) 43º N
3.) Syracuse, Rochester, Niagara Falls, Utica
4.) The North Pole/ 90 ºN
5.) The equator
6.) Round

STATION 2

For the following coordinates, determine the correct city



1. 33°N latitude, 112°W longitude _____

2. 35°N latitude, 78°W longitude _____

3. 45°N latitude, 122°W longitude _____

4. 29°N latitude, 95°W longitude _____

5. 43°N latitude, 79°W longitude _____

6. 25°N latitude, 80°W longitude _____

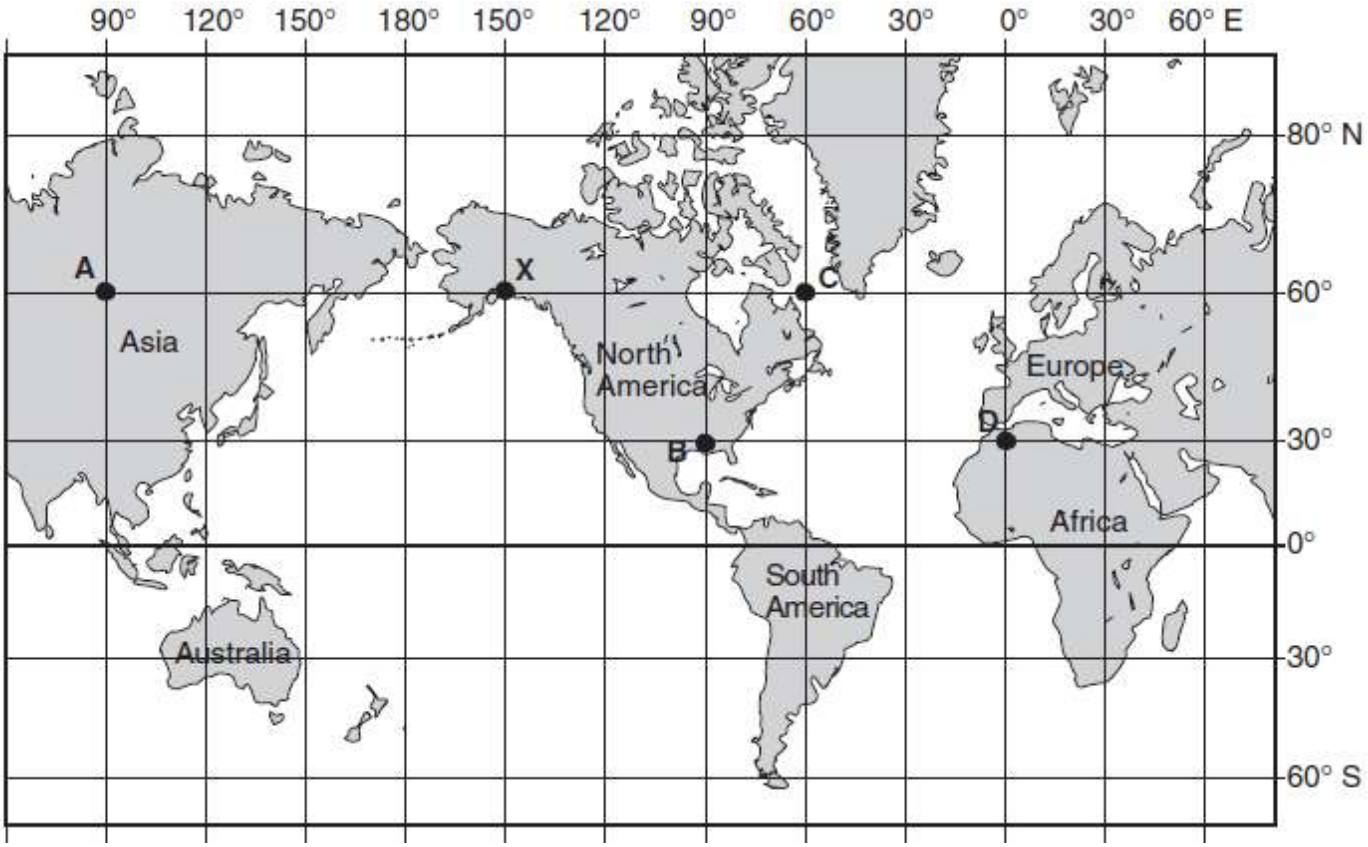
7.) Earth Rotates from ____ to _____. (Compass Direction)

8.) At which location would the sun *set last?*

9.)* At which location would the sun *rise first?

1.) Phoenix
2.) Raleigh
3.) Portland
4.) Houston
5.) Niagara Falls
6.) Miami
7.) West to East
8.) Portland
9.) Boston

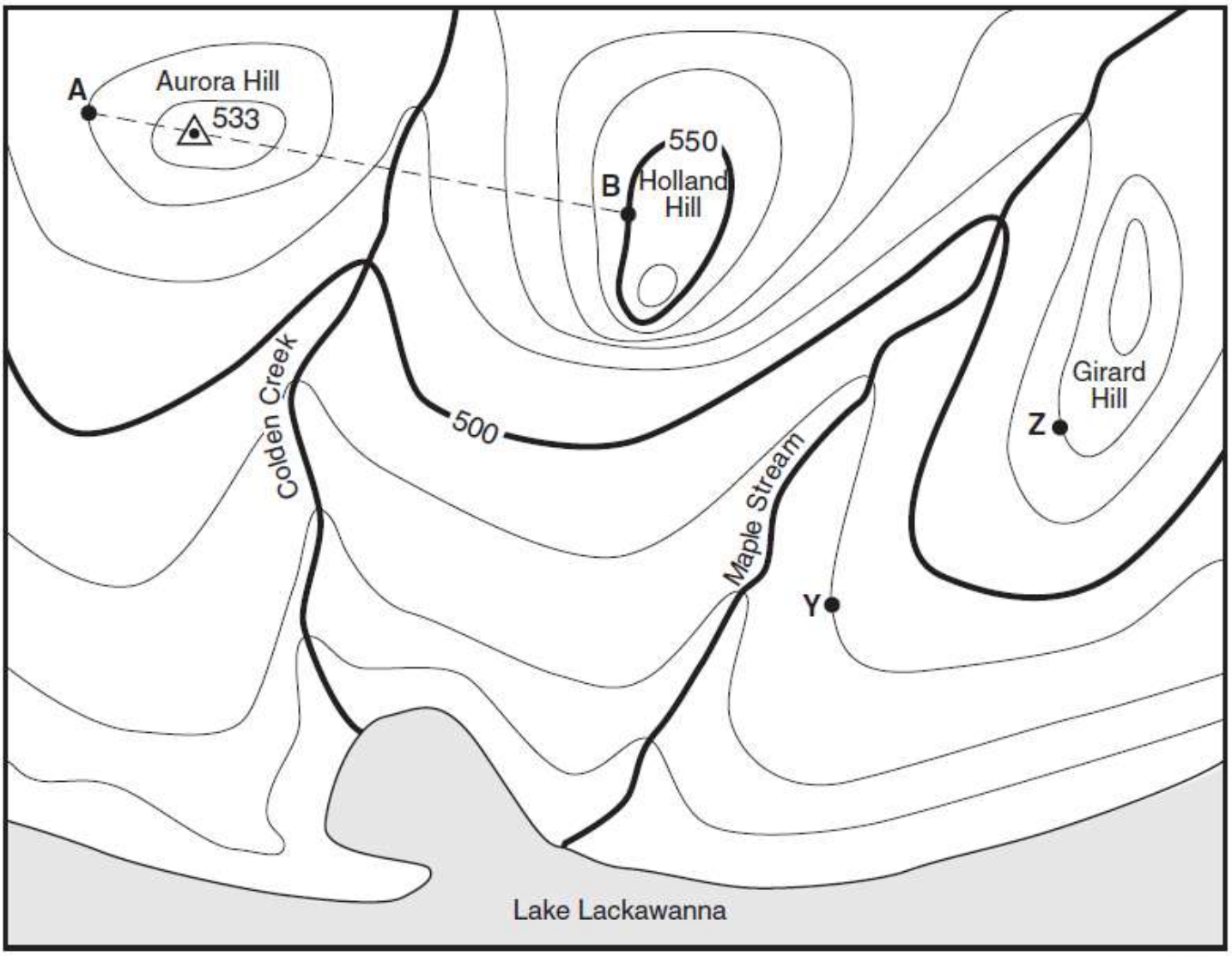
Station 3



1.) What is Earth's Rate of Rotation (include units)?
2.) A change in 15 degrees _____(Longitude or latitude) will change one's time by _____ hour(s).
3.) If it is 3 p.m at location x, is it later in the day, or earlier in the day at location c?
4.) What is the time difference, in hours, between location x and location C?
5.) What is the time at location C, when it is 3 p.m. at location X?
6.) What time is it at location A when it is 3p.m. at location X?

1.) 15 º/hr
2.) Longitude, 1 hour
3.) Later in the day (traveled east)
4.) 6 hours
5.) 9 p.m.
6.) 7 a.m.

Station 4



1.) What is the contour interval on this map?
2.) What is the elevation of point Z?
3.) What is the maximum elevation of Holland Hill?
4.) What is the minimum elevation of Girard Hill?
5.) What is the gradient from point Y to Z?
6.) What is the elevation at the peak of Aurora Hill?

1.) 10 ft

2.) 520 ft

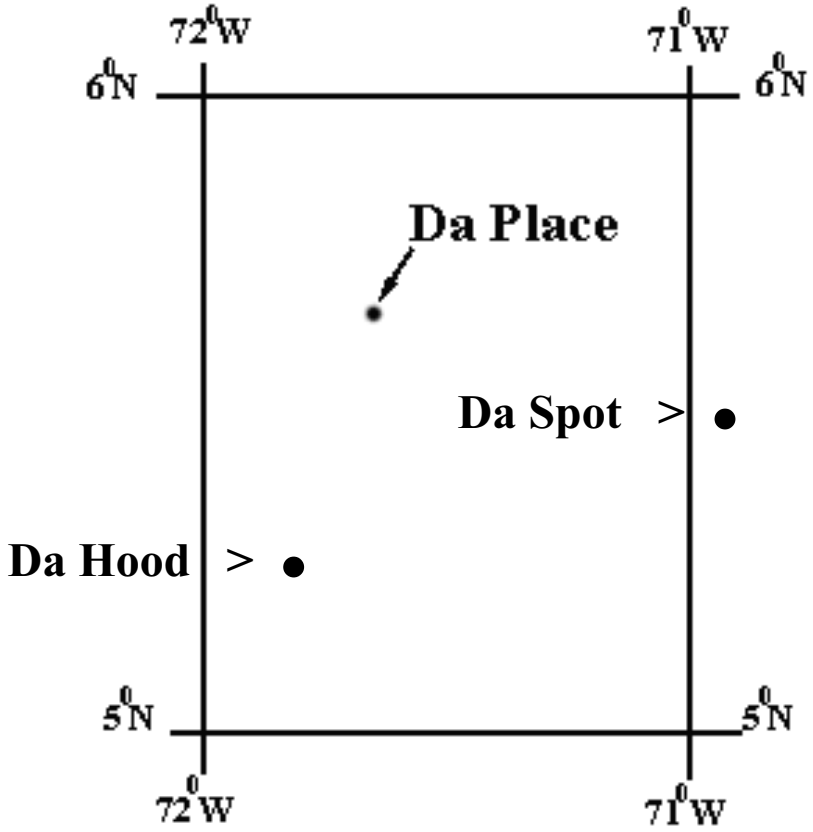
3.) 569 ft

4.) 531 ft.

5.) 6.67 ft/mile

6.) 533 ft.

Station 5



For the following locations, estimate the coordinates in both degrees and minutes. Note that 30' tick marks have NOT been draw on this map

1. **What is the approximate coordinates of Da Place?**
2. **What is the approximate coordinates of Da Spot?**
3. **What is the approximate coordinates of Da Hood?**
4. **What is the most accurate representation of the earth's shape?**
5. **What is the best piece of evidence that proves that earth is round?**

1.)5º40' N, 71 º40'W

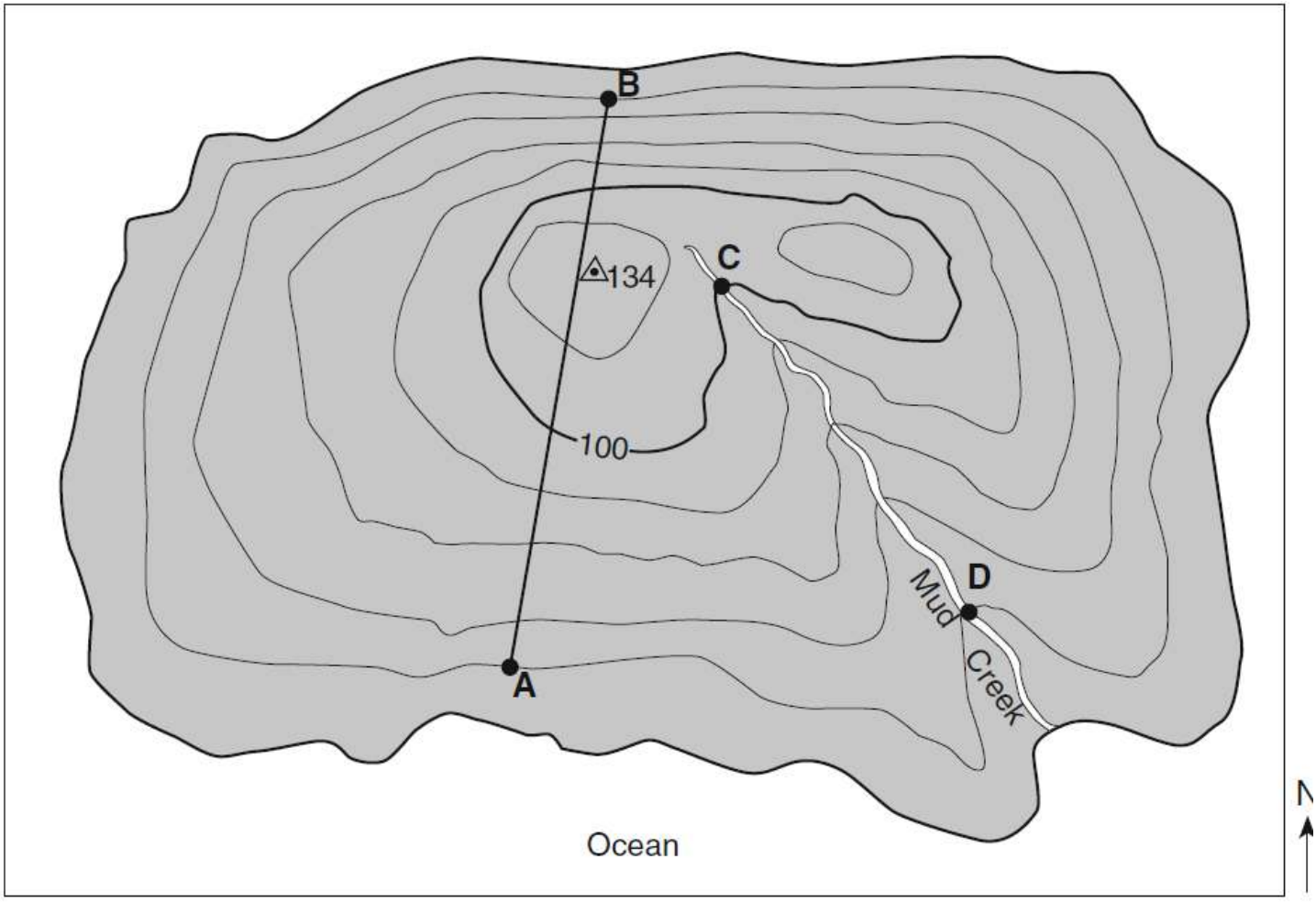
2.)5 º30' N, 70 º55' W

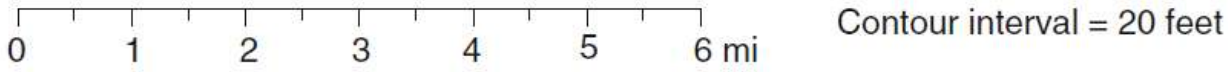
3.)5 º 15'N, 71 º45' W

4.)A sphere. In a model this is a globe

5.)Satellite images taken from space

STATION 6





Contour interval = 20 feet

1.) What is the elevation of the first contour line shown on this map?

2.) In which direction is Mud Creek Flowing?

3.)Give <u>two pieces</u> of evidence provided by the contour lines that explain the stream flow direction.

4.)If you were to draw a general profile along A to B, what would it show?

5.)What is a possible elevation at the <u>source</u> of Mud Creek?

6.) If this island were a volcano that erupted, and the mountain peak blew off, what type of contour line would be drawn on the map to depict a depression? Write the symbol down.

1.) 0 ft.
2.) SE/southeast
3.) The contour lines bend and make a v which points NW/North West OR the contour lines show that elevation is increasing to the north west, therefore water flows downstream southeast
4.) You would start at 20 ft, and gradually climb a hill at 134 ft, then you would descend back down to 20 ft, but at a steeper slope (greater gradient)
5.) 101-119 ft
6.) A hatchured contour line