1. What is the approximate altitude of Polaris at Syracuse, New York?
A) $43^{\circ}$
B) $47^{\circ}$
C) $76^{\circ}$
D) $90^{\circ}$
2. If an observer on Earth views Polaris on the horizon, the observer is located at the
A) equator $\left(0^{\circ}\right)$
B) North Pole $\left(90^{\circ} \mathrm{N}\right)$
C) Tropic of Cancer ( $23.5^{\circ} \mathrm{N}$ )
D) Tropic of Capricorn $\left(23.5^{\circ} \mathrm{S}\right)$
3. From Utica, New York, Polaris is observed at an altitude of approximately
A) $43^{\circ}$
B) $47^{\circ}$
C) $75^{\circ}$
D) $90^{\circ}$
4. At which New York State location would an observer measure the highest altitude of Polaris?
A) New York City
B) Slide Mountain
C) Niagara Falls
D) Plattsburgh
5. At which location is the altitude of Polaris approximately $42^{\circ}$ ?
A) Niagara Falls
B) Elmira
C) Watertown
D) Massena
6. The diagram below shows an observer on Earth viewing the star Polaris.


What is the observer's latitude?
A) $38^{\circ} \mathrm{N}$
B) $38^{\circ} \mathrm{S}$
C) $52^{\circ} \mathrm{N}$
D) $52^{\circ} \mathrm{S}$
7. The lines on which set of views best represent Earth's latitude system?
A)

B)

C)

D)

8. What is the approximate location of the Canary Islands hot spot?
A) $32^{\circ} \mathrm{S} 18^{\circ} \mathrm{W}$
B) $32^{\circ} \mathrm{S} 18^{\circ} \mathrm{E}$
C) $32^{\circ} \mathrm{N} 18^{\circ} \mathrm{W}$
D) $32^{\circ} \mathrm{N} 18^{\circ} \mathrm{E}$
9. As a ship crosses the Prime Meridian, an observer on the ship measures the altitude of Polaris at $60^{\circ}$. What is the ship's location?
A) $60^{\circ}$ south latitude and $0^{\circ}$ longitude
B) $60^{\circ}$ north latitude and $0^{\circ}$ longitude
C) $0^{\circ}$ latitude and $60^{\circ}$ east longitude
D) $0^{\circ}$ latitude and $60^{\circ}$ west longitude
10. Base your answer to the following question on the map below, which shows the latitude and longitude of five observers, $A, B, C, D$, and $E$, on Earth.


Which two observers would be experiencing the same apparent solar time?
A) $A$ and $C$
B) $B$ and $C$
C) $B$ and $E$
D) $D$ and $E$
11. When the time of day for a certain ship at sea is 12 noon, the time of day at the Prime Meridian ( $0^{\circ}$ longitude) is 5 p.m. What is the ship's longitude?
A) $45^{\circ} \mathrm{W}$
B) $45^{\circ} \mathrm{E}$
C) $75^{\circ} \mathrm{W}$
D) $75^{\circ} \mathrm{E}$
12. The diagram below represents part of Earth's latitude-longitude system.


What is the latitude and longitude of point $L$ ?
A) $5^{\circ} \mathrm{E} 30^{\circ} \mathrm{N}$
B) $5^{\circ} \mathrm{W} 30^{\circ} \mathrm{S}$
C) $5^{\circ} \mathrm{N} 30^{\circ} \mathrm{E}$
D) $5^{\circ} \mathrm{S} 30^{\circ} \mathrm{W}$
13. Approximately what are the coordinates of the Hawaii Hot Spot?
A) $50^{\circ} \mathrm{N}, 120^{\circ} \mathrm{W}$
B) $25^{\circ} \mathrm{N}, 158^{\circ} \mathrm{E}$
C) $25^{\circ} \mathrm{N}, 158^{\circ} \mathrm{W}$
D) $25^{\circ} \mathrm{S}, 158^{\circ} \mathrm{E}$

## Mid Term Prep-Latitude and Longitude

14. Base your answer to the following question on
the map below. The isolines on the map show the increases in elevation that have occurred since the end of the ice age in this part of North America. $A$ and $B$ are two points on isolines. Several towns within the area are indicated.


What is the approximate latitude and longitude of Fort George?
A) $54^{\circ} \mathrm{N} 78^{\circ} \mathrm{W}$
B) $66^{\circ} \mathrm{N} 82^{\circ} \mathrm{W}$
C) $78^{\circ} \mathrm{N} 54^{\circ} \mathrm{W}$
D) $82^{\circ} \mathrm{N} 66^{\circ} \mathrm{W}$
15. Which latitude and longitude coordinates represent a location on the continent of Australia?
A) $20^{\circ} \mathrm{N}, 135^{\circ} \mathrm{E}$
B) $20^{\circ} \mathrm{N}, 135^{\circ} \mathrm{W}$
C) $20^{\circ} \mathrm{S}, 135^{\circ} \mathrm{E}$
D) $20^{\circ} \mathrm{S}, 135^{\circ} \mathrm{W}$
16. Which diagram best shows the altitude of Polaris observed near Buffalo, New York?
A)

B)

C)

D)

17. The map below shows the location and diameter, in kilometers, of four meteorite impact craters, A, B, C, and D, found in the United States.


What is the approximate latitude and longitude of the largest crater?
A) $35^{\circ} \mathrm{N} 111^{\circ} \mathrm{W}$
B) $39^{\circ} \mathrm{N} 83^{\circ} \mathrm{W}$
C) $44^{\circ} \mathrm{N} 90^{\circ} \mathrm{W}$
D) $47^{\circ} \mathrm{N} 104^{\circ} \mathrm{W}$
18. Base your answer to the following question on the diagram below, which represents latitude and longitude lines on Earth. Points $A$ through $E$ represent locations on Earth. Arrows represent direction of rotation.


What is the approximate latitude and longitude of location $A$ ?
A) $160^{\circ} \mathrm{N}, 15^{\circ} \mathrm{E}$
B) $160^{\circ} \mathrm{S}, 15^{\circ} \mathrm{W}$
C) $15^{\circ} \mathrm{N}, 160^{\circ} \mathrm{E}$
D) $15^{\circ} \mathrm{N}, 160^{\circ} \mathrm{W}$
19. Which graph best represents the altitude of Polaris observed at northern latitude positions on the Earth's surface?
A)

B)

C)

D)

20. Base your answer to the following question on the latitude and longitude system shown below. The map represents a part of the Earth's surface and its latitude-longitude coordinates. Points $A$ through $F$ represent locations in this area.


How are latitude and longitude lines drawn on a globe of the Earth?
A) Latitude lines are parallel and longitude lines meet at the poles.
B) Latitude lines are parallel and longitude lines meet at the Equator.
C) Longitude lines are parallel and latitude lines meet at the poles.
D) Longitude lines are parallel and latitude lines meet at the Equator.
21. Cities located on the same meridian (longitude) must have the same
A) altitude
B) latitude
C) length of daylight
D) solar time

