Name: _____

Motions of the Sun – Pretest

Answer the following questions.

Question 1: The sun rises lowest (its maximum altitude during the day is smallest) in our sky (assume a mid United States latitude) on …

a) March 21
b) June 21
c) September 21
d) December 21

Question 2: At which of the following latitudes can an observer see the sun at their zenith on October 18?

a) 20° N
b) 10° N
c) 0°
d) 10° S
e) 20° S

Question 3: On the vernal equinox the sun sets directly west. Where will the sun set two weeks later?

a) north of west
b) south of west

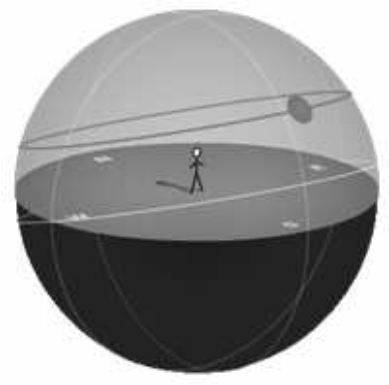
Question 4: On which of the following dates will an observer at 85° N see the sun above the horizon all day long?

a) June 21
b) December 21
c) The sun will rise and set everyday of the year at this latitude.

Question 5: From Tampa, FL (lat = 28°N), the meridinal altitude of the star Sirius (dec=-16°) is: _____

Question 6: From Lincoln, NE, (lat=41°N), the meridinal altitude of the sun on the autumnal equinox is: _____

Question 7: The horizon diagram below shows the path of the sun on the _____ from a latitude of 75°N.



a) summer solstice
b) autumnal equinox
c) winter solstice

Question 8: The horizon diagram below shows the path of the sun on the summer solstice from a latitude of _____.

a) 0°
b) 30° N
c) 60° N
d) 90° N