

QUIZ 3 – THE SEASONS (RETAKE)

Name: _____ Lab Section: M0 _____
(if you want your paper back)

On the back of this page, you'll find a diagram of Earth similar to the one on your homework.

1. Consider an observer on the Antarctic Circle.

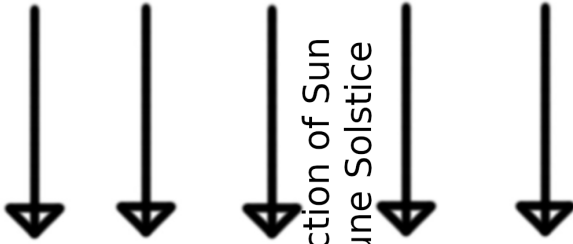
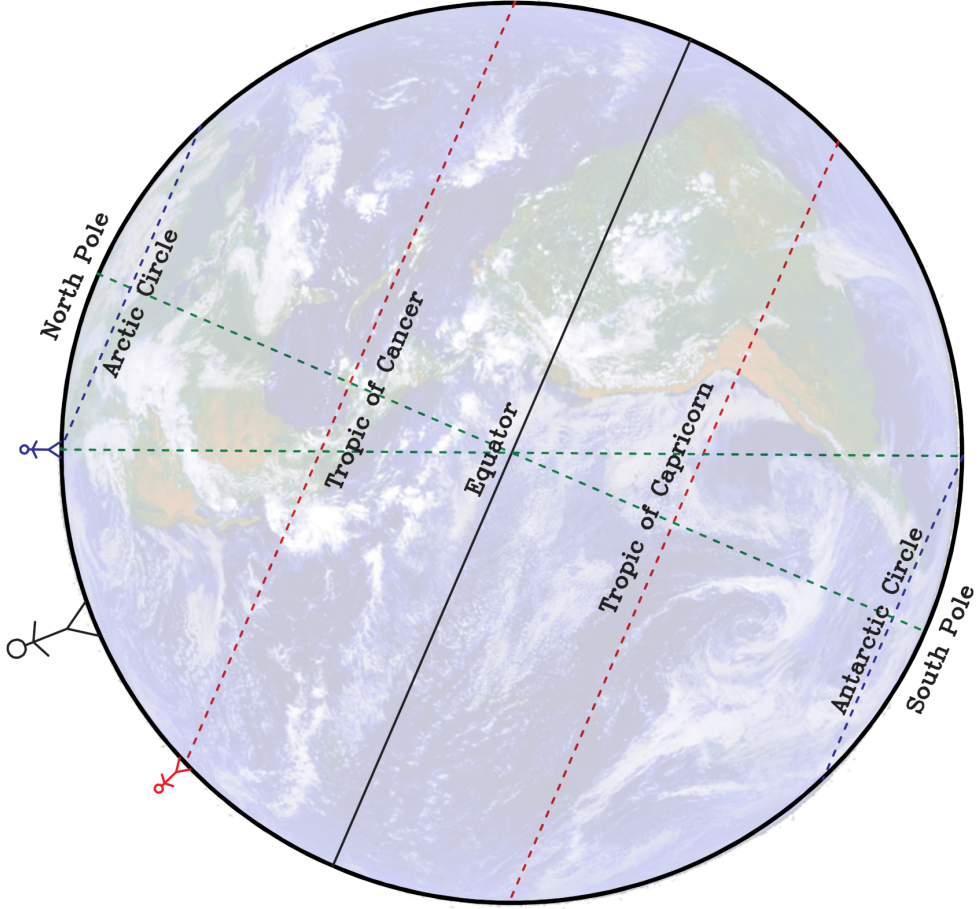
(a) Where would this observer see the Sun at noon on the December solstice? Draw a stick figure on the globe (oriented correctly with an arrow toward the Sun) to argue that your answer is correct.

(b) Where would this observer see the Sun at midnight on the December solstice? Draw a stick figure on the globe (oriented correctly with an arrow toward the Sun) to argue that your answer is correct.

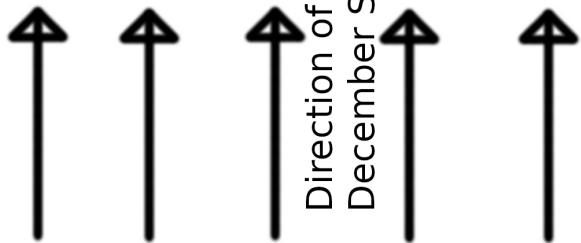
2. An observer sees the Sun high in their northern sky at noon on the June solstice. Six months later, on the December solstice, they see the Sun high in their southern sky at noon.

(a) Where on Earth is this person located? Mark this observer's possible location on Earth and label it "2a".

(b) Would this observer have more hours of daylight in December, more hours of daylight in June, or an equal amount in both?



Direction of Sun
on June Solstice



Direction of Sun on
December Solstice