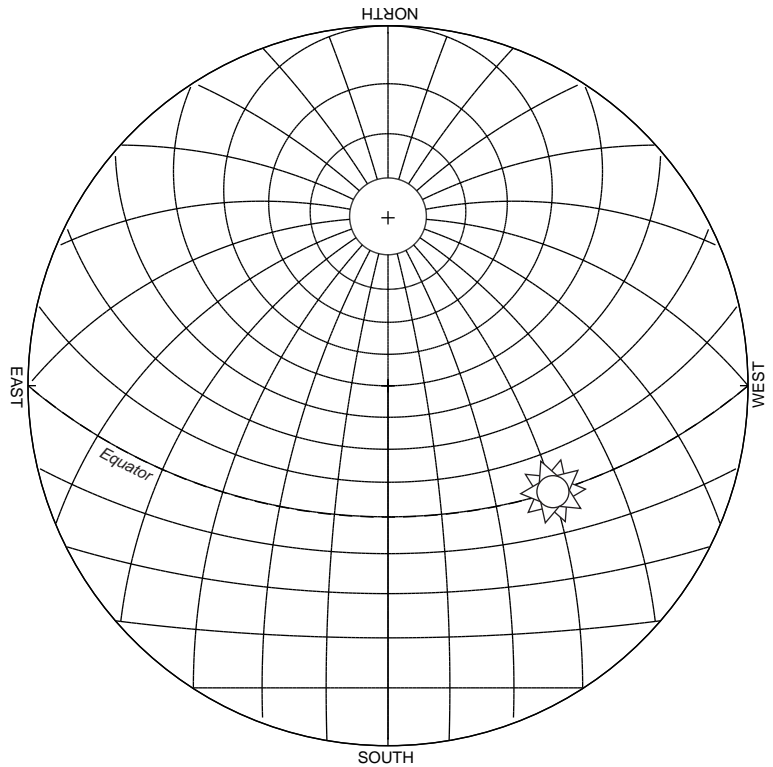# AST 101: RA, Declination, and Time worksheet
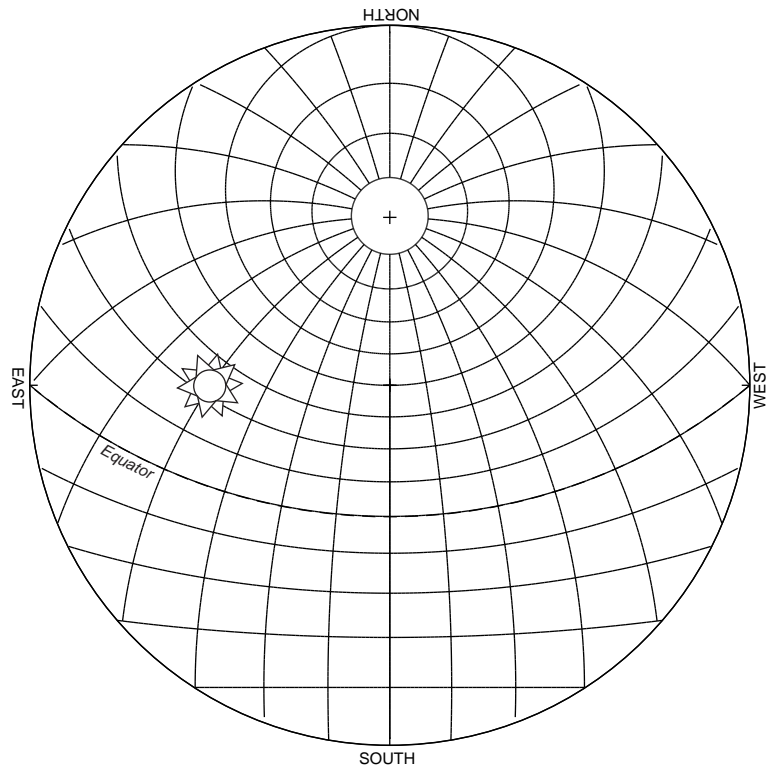
The sidereal time for the diagram at right is 3h.

a) What is the local apparent solar time?

b) What is the RA of the sun?

c) What is the Declination of the sun?

d) What is the approximate date?

The sidereal time for the diagram at right is 2h.

a) What is the local apparent solar time?

b) What is the RA of the sun?

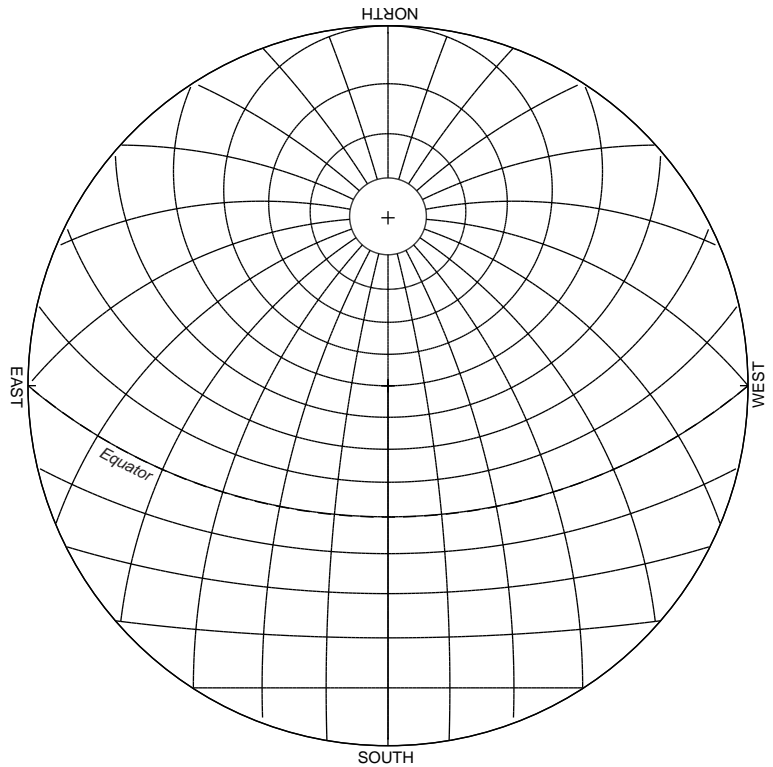c) What is the Declination of the sun?

d) What is the approximate date?

The local apparent solar time for the diagram at right is 5 pm. The declination is 23.5° N.

a) Plot an "X" on the diagram to mark the sun's location.

b) What is the approximate date?

c) What is the RA of the sun?

d) What is the sidereal time?

The local apparent solar time for the diagram at right is 10 am. The sun's RA is 18h.

a) What is the sidereal time?

b) What is the approximate date?

c) What is the Declination of the sun?

d) Plot an "X" on the diagram to mark the sun's location.