

## HORIZON SYSTEM ANSWER SHEET

Latitude: \_\_\_\_\_

Declination	Position	Hour Angle (decimal hours)	Altitude (deg. & arcmin.)	Azimuth (deg. & arcmin.)
$0^{\circ}$	Rises			
$0^{\circ}$	UT			
$0^{\circ}$	Sets			
$0^{\circ}$	LT			
$25^{\circ}$	Rises			
$25^{\circ}$	UT			
$25^{\circ}$	Sets			
$25^{\circ}$	LT			
$65^{\circ}$	Rises			
$65^{\circ}$	UT			
$65^{\circ}$	Sets			
$65^{\circ}$	LT			

To answer the following questions, vary the declination until the condition is satisfied as seen from this latitude:

1. What is the declination of an object that makes UT at the zenith?
2. What is the declination of an object that makes LT at the north point of the horizon?
3. What is the declination of the southern most star that can be observed from this latitude?
4. At what declination do objects begin to have diurnal circles that are entirely above the celestial horizon?