

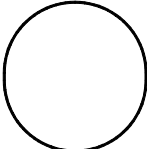
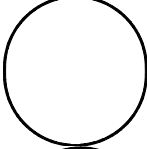
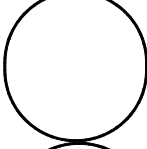
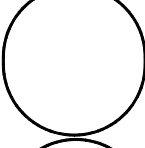
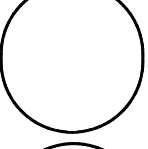
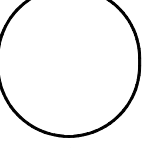
Date _____

BINARY STAR LAB Name _____

1.0 PURPOSE: To observe and separate double-star objects.

2.0 PROCEDURE: Certain stars have been determined to be double-stars. That is, they exist in proximity to another star, perhaps not nearly as visible, whose gravitational force affects their proper motion. These are to be observed in the 8" telescope to determine if they may be viewed along with their companion star. If the star is well-known, direct sighting (DS) has been accomplished, otherwise the star is acquired using its published coordinates in the Norton Star Atlas, and the telescope's setting circles (SS). A sketch is to be made of each star with its companion, if possible, as seen in the telescope's eyepiece.

3.0 DATA: Information on each star is listed in the following table:

<u>STAR IDENT.</u>	<u>R.A.</u>	<u>DEC.</u>	<u>SEP.</u>	<u>MAGS.</u>	<u>EYEPIECE</u>	<u>COMMENTS</u>
1) Algieba (gamma Leonis)	10h20'	+20°	4.4"	2.4/3.6		
2) Polaris (alpha Ursae Minoris)	2h32'	+89°	18.4"	2.0/9.0		
3) Mizar (zeta Ursa Majoris)	13h22'	+55°	14.5"	2.4/3.9		
4) Cor Caroli (alpha Canum Venaticorum)	12h56'	+38°	19.4"	2.9/5.5		
5) Rigel (beta Orionis)	5h12'	-8°	9.2"	0.2/7.0		
6) Castor (alpha Geminorum)	7h35'	+32°	3.9"	1.9/2.9		
7) epsilon Monocerotis	6h21'	+4°	13.2"	4.5/6.5		