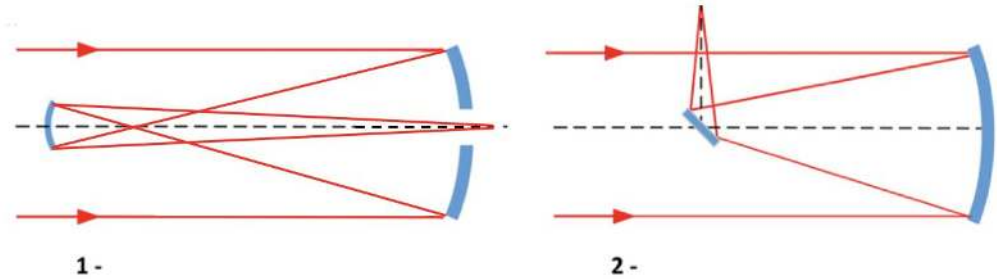
August 2022
IOAA
Georgia

# Daytime Observation

Cover Sheet

## O5 [9 Points]

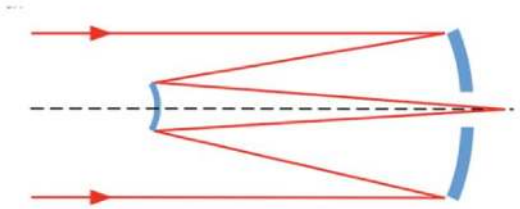
The image below shows schematic representations of three different types of reflectors.



1 -



2 -



3 -

For each one, choose the correct name from the list below. (3 points each)
(A) Newtonian (B) Pfund (C) Gregorian (D) Herschelian (E) Keplerian (F) Coudé (G) Galilean (H) Cassegrain

**1.** _____

**2.** _____

**3.** _____

## O6 [21 Points]

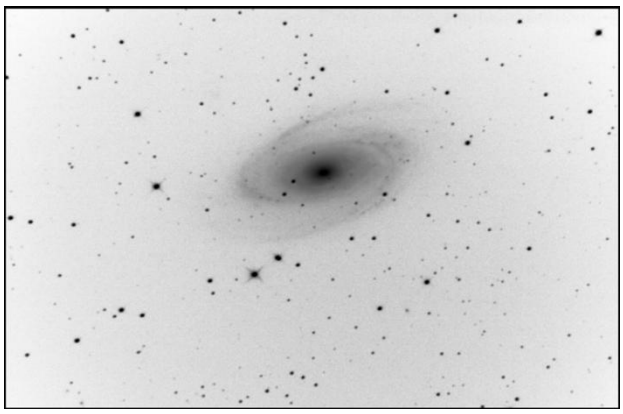
The equatorial constellations are listed below. Fill in the missing ones in the correct order. Use the IAU codes or official names accepted by the IAU.

1. Serpens (Ser) 2. Ophiuchus (Oph) 3. _____ 4. Aquarius (Aqr) 5. Pisces (Psc). 6. Cetus (Cet)7. _____ 8. _____ 9. _____ 10. Monoceros (Mon) 11. Canis Minor (CMi)12. _____ 13. _____ 14. _____15. Virgo (Vir)

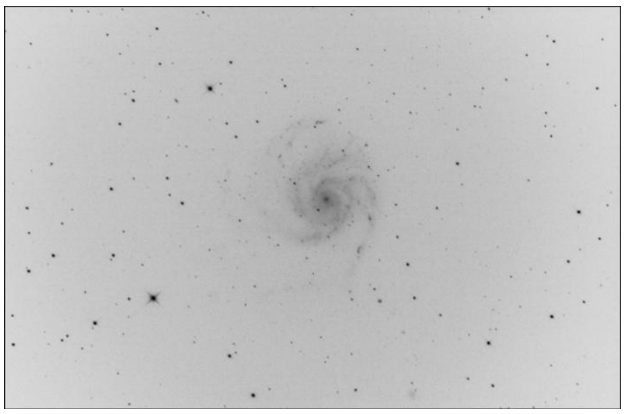
Which of these 15 constellations are also on the ecliptic? If you give more than the required number of constellations, only the first ones you write (in order) will be considered.

## O7 [20 Points]

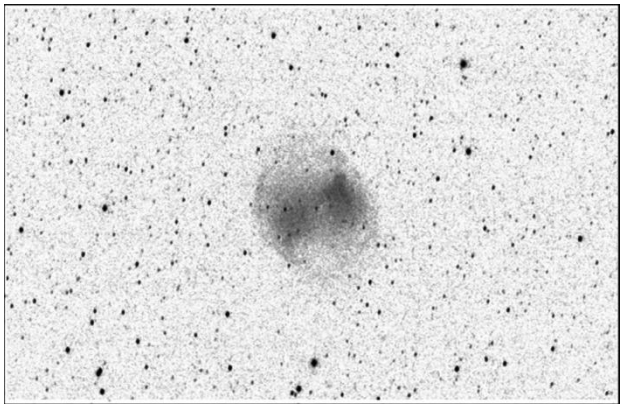
Write the numbers in Messier catalogue, and the constellations (IAU code) of the given Messier Objects (4 points for each object).



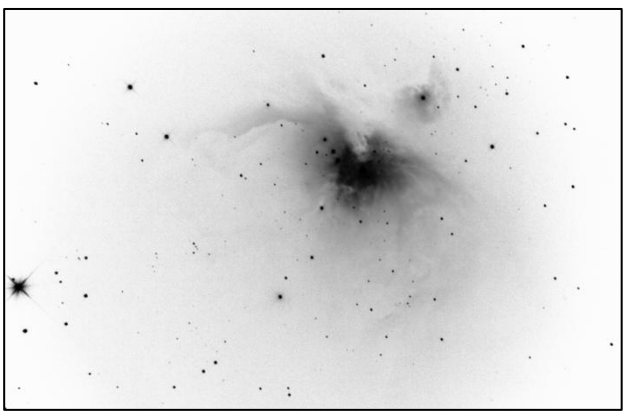
I



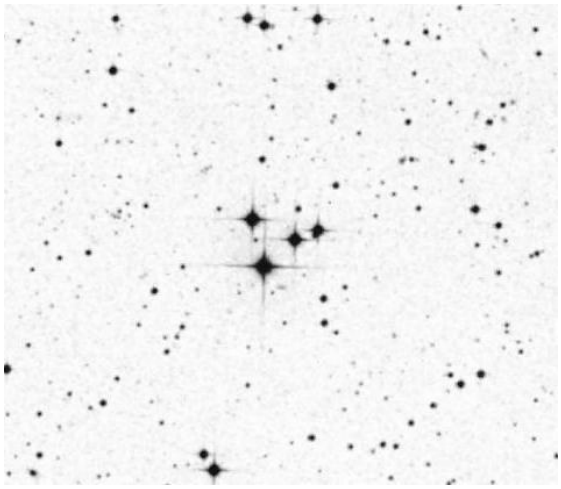
II



III



IV



V

I _____

II _____

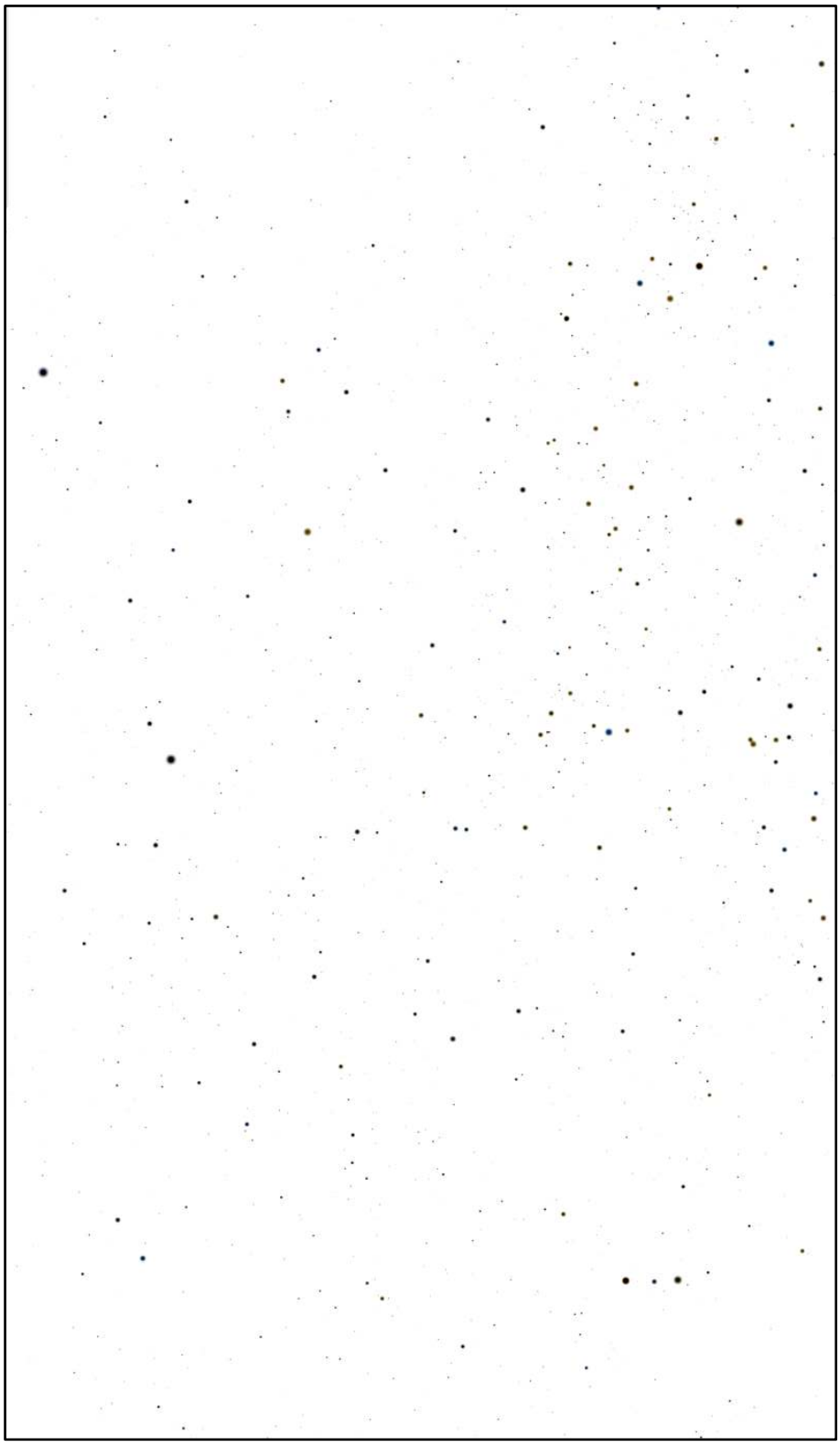
III _____

IV _____

V _____

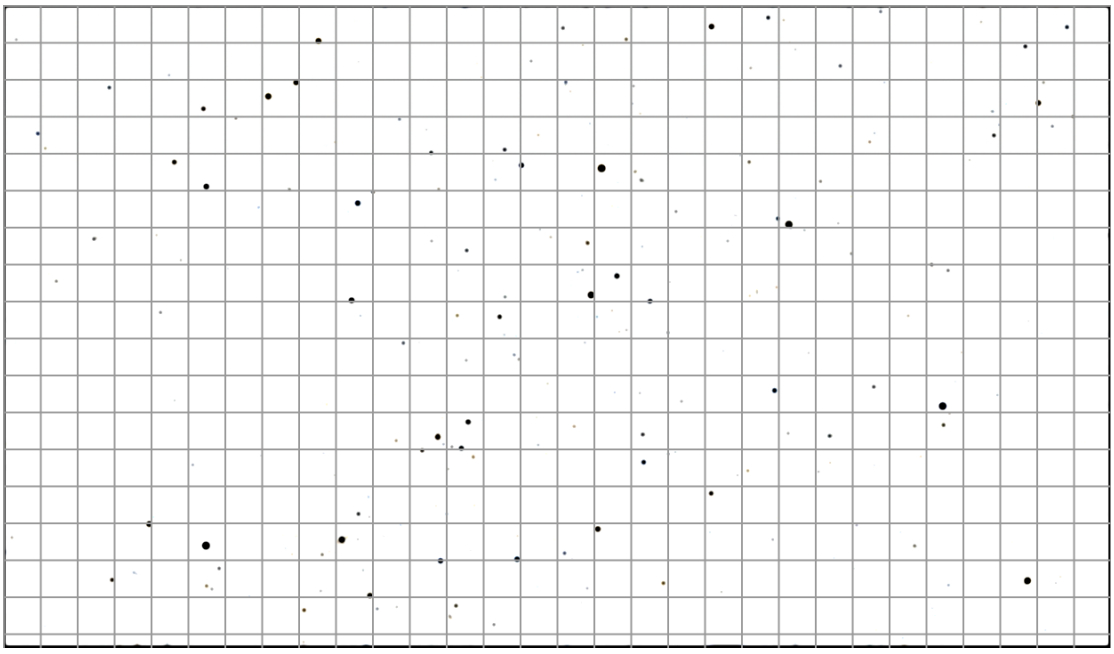
## O8 [30 Points]

There are three additional and two missing stars on the figure given below. Circle them and number them as 1, 2, 3 (additional stars), 4, 5 and 6 (missing stars).

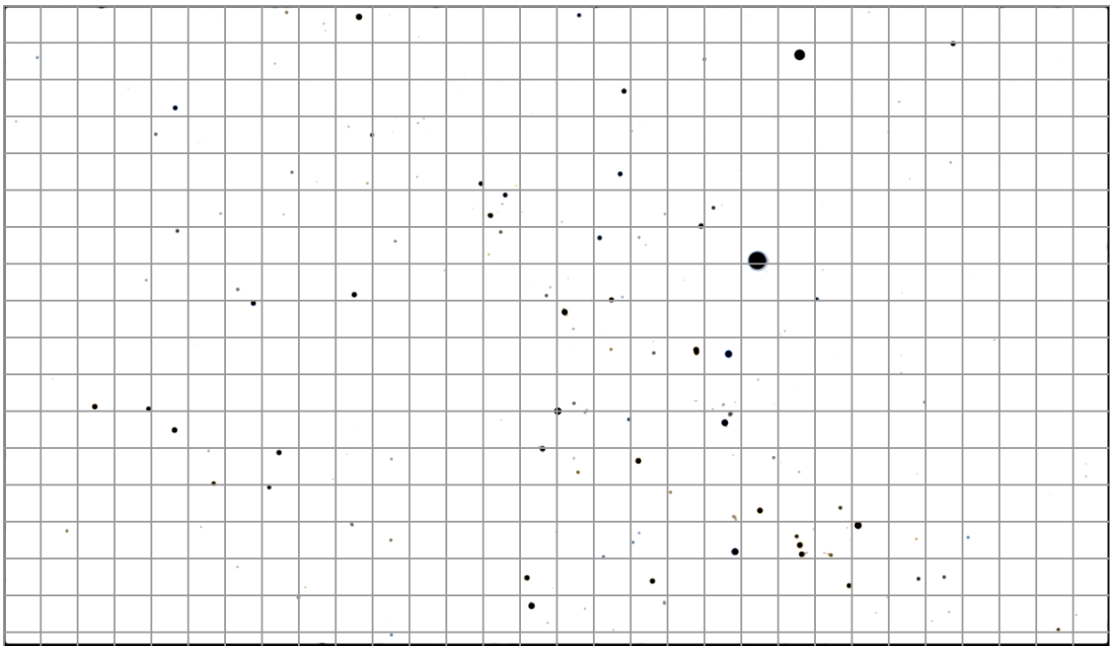


## O9 [5 Points]

Calculate the time interval between the two figures given below if the first figure occurs earlier than the second one, and the time interval is less than one sidereal day



Initial



Final