M39 Analysis

Name:
Group Members:
Date:

**Derive the Distance to the cluster**

B-V of Sun = 0.6

*Absolute Visual Magnitude* (from H-R Diagram)

\[ M_{\text{Sun}} = \]

\[ M_{M39} = \]

Distance to M39 (pc) =

**Density of Stars**

Distance to M39 (pc) =

\[ W_a (\text{arcmin}) = 13 \text{ arcmin} \]

\[ W_a (\text{radians}) = \]

\[ W_{\text{pc}} (\text{pc}) = \]

Volume: \[ V = W_{\text{pc}}^3 \]

Number of stars in one field: \[ N = \]

Density of stars: \[ n_{M39} = N/V \]