

| Galaxy Field Name | Abs Mag M | Photon Count | App Mag m | Dist in pc | Dist in Mpc | $\lambda_{\text{line measured K Line}}$ | $\lambda_{\text{line measured H Line}}$ | $\Delta\lambda_{\text{H}}$ | $\Delta\lambda_{\text{K}}$ | Velocity H | Velocity K | Velocity AVG |
|-------------------|-----------|--------------|-----------|------------|-------------|---|---|----------------------------|----------------------------|------------|------------|--------------|
| | -22 | | | | | | | | | | | |
| | -22 | | | | | | | | | | | |
| | -22 | | | | | | | | | | | |
| | -22 | | | | | | | | | | | |
| | -22 | | | | | | | | | | | |

Using the Graph: Average Value of H = _____ km/sec/Mpc

Useful Equations and Quantities

$$M = m + 5 - 5 * \log D$$

$$v_K = c * \frac{\Delta\lambda_K}{\lambda_K}$$

$$1 \text{ light year} = .306 \text{ pc}$$

$$\log D = \frac{m - M + 5}{5}$$

$$\Delta\lambda_H = \lambda_{H \text{ measured}} - \lambda_H$$

$$1 \text{ MPC} = 1 \times 10^6 \text{ pc}$$

$$v_H = c * \frac{\Delta\lambda_H}{\lambda_H}$$

$$\Delta\lambda_K = \lambda_{K \text{ measured}} - \lambda_K$$

$$1 \text{ pc} = 3.26 \text{ light years}$$

Wavelength of K Line:

$$\lambda_K = 3968.47$$

Wavelength of H Line:

$$\lambda_H = 3968.47$$

$$c = 3 \times 10^5 \text{ km/sec}$$