

ASTRO 1020 Lab

L4: Period-Luminosity Relation

Grading

- All labs are scaled to be graded out of **10 points***

Points per question	Description
1.0	A correct answer <u>with</u> units <u>and</u> work shown. Answers that don't require work will be <u>graded on completion</u>
0.8	A correct answer <u>without</u> units or work shown
0.6	An incorrect answer <u>with</u> units <u>and</u> work shown
0.4	An incorrect answer <u>without</u> units or work shown
0.2	Some work shown <u>without</u> an answer
0.0	Not Attempted

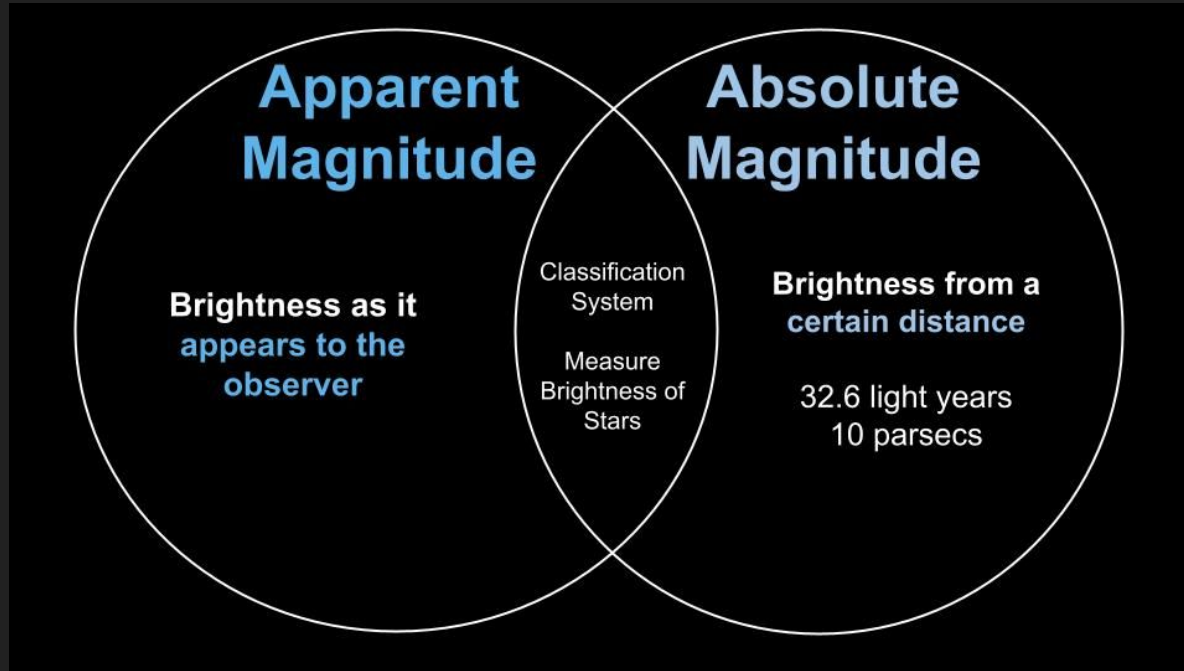
Lab Schedule

Lab	Dates	Topic
LAB 1	Sept 9 – 13	Sun
LAB 2	Sept 16 – 20	Spectra
LAB 3	Sept 23 – 27	Binary Stars
LAB 4	Sept 30 – Oct 4	Period-Luminosity
LAB 5	Oct 7 – 11	Hubble's Law
LAB 6	Oct 14 – 18	Galaxy Classification
LAB 7	Oct 21 – 25	Tully-Fisher Relation
LAB 8	Oct 28 – Nov 1	Star Clusters & Supernovae
LAB 9	Nov 4 – 8	Black Holes
Semester Project	Nov 18 – 22	

Things you need to know for Lab 4

- Using excel
- Difference between apparent and absolute magnitude
- Distance modulus equation
- Logs

Apparent and absolute magnitude



Distance Modulus

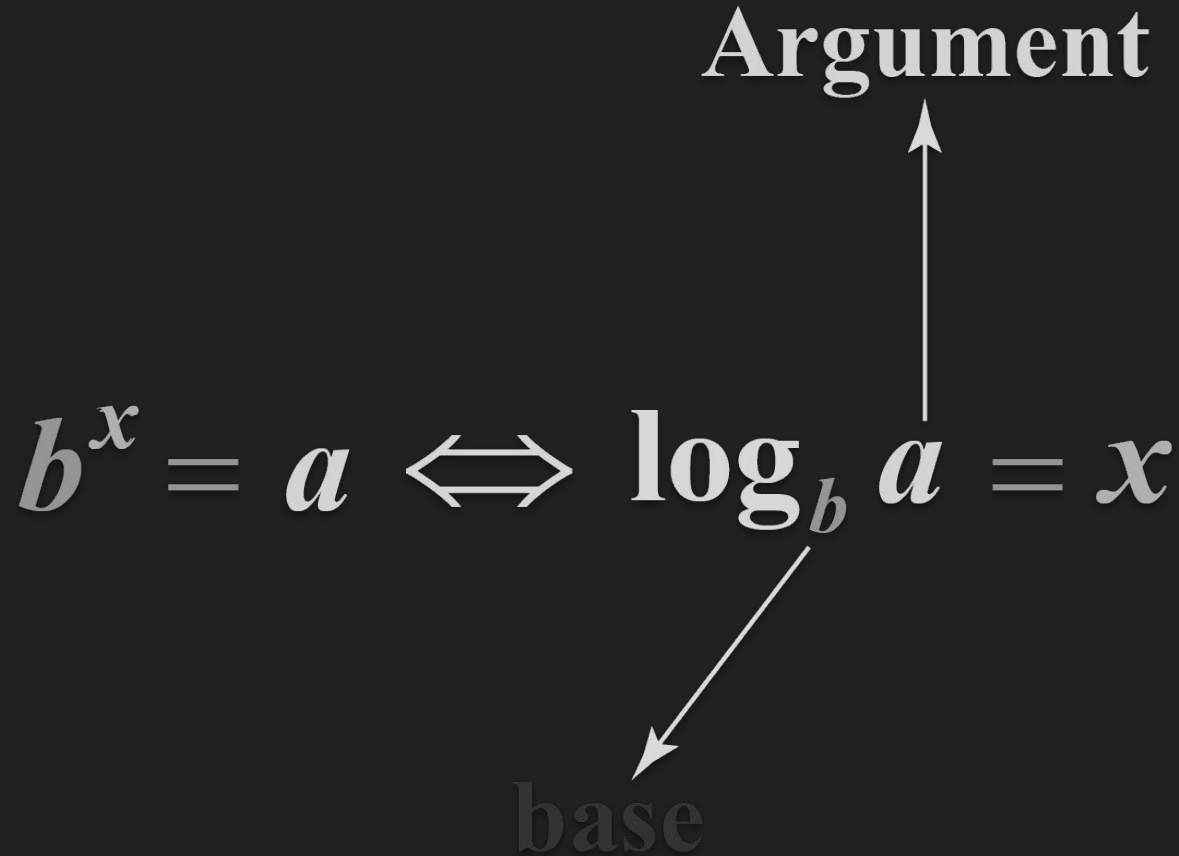
$$M = m + 5 - 5 \cdot \log(D)$$

Logs

$$b^x = a \iff \log_b a = x$$

Argument

base



Questions?