Reading Guide

Directions: Read the listed sections and then answer the related questions. This Reading Guide is due before class starts on Monday. Please submit it as a single pdf of Canvas.

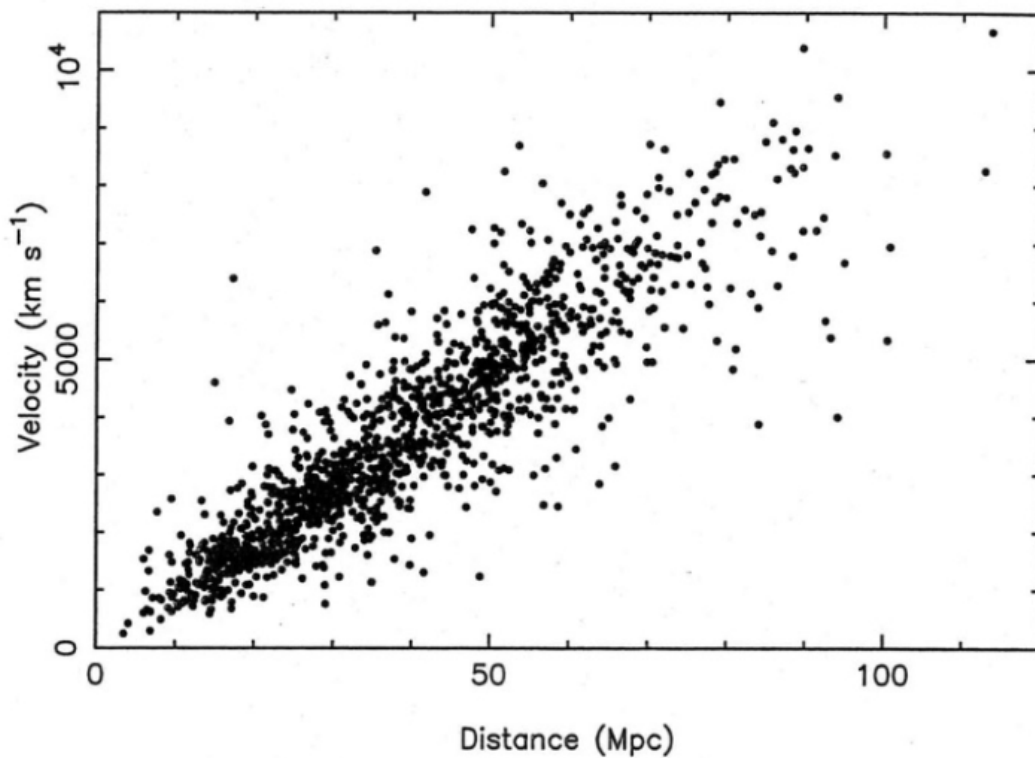| Category	Score	Work Description
Reading Guide – 2pts	0 / 2	Substantially unfinished or missing
(Completion/Correctness)	1 / 2	Work is only partially completed or unsatisfactory
	2 / 2	Completed and good faith effort was made towards correctness

Total − 2pts   / 2

Reading: *Foundations of Algebra and Mathematical Modeling*

- Horizontal and Vertical Intercepts (pages 26-27)

- Point Slope Form of a Line (pages 40-41)

- Residuals (pages 55-56)

- Least Squares Regression and Summary (pages 62-66)

Questions:

1. Use technology to find the line of best fit for the following data. *You can use whichever method from the textbook that you prefer. We will be using Desmos on this week's Project.*

$$(0, 0), (2, 2), (5, 15) \tag{1}$$

Distance (Mpc)

2. Look at the graph above. What do you notice? What do you wonder?

3. Does this relationship look roughly linear?

4. Draw a regression line for this graph. Do not use technology to find the line of best fit. Do your best to estimate a well-fitting line just looking at the graph.

5. Use two points on your line to find the equation of your regression line.