Names

**DATA:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | Star 1 | Star 2 | Star 3 | Star 4 | Star 5 | Star 6 | Star 7 |
| Distance from location X (cm) |   |   |   |   |   |  |  |
| Parallax (cm) |   |   |   |   |   |  |  |

**Use the Data above to create a graph. Be sure to put correct variable on correct axis, label axis and put units, title graph, and draw line of best fit.**

1. What is the dependant variable for what you did?

2. What was the independent variable?

3. What was a constant?

4. How does the parallax of a nearby object compare to that of a more distant object?

5. How much parallax would an **extremely** distant object have?

6. Could parallax be used to measure the distance to all stars?

Explain your answer.

7. What is the relationship between the parallax of a star and its distance? (look at what your graph shows)

**Leave the X and Y mark and the center mark on the table, but pull up your “stars”. Take your roll of paper, flip it over and reattach it to the table. Place another “star” along your center line at some unknown distance.**

8. Without using your meter stick to measure the “star’s” distance from X, how could you determine its distance? (explain)

9. Do what you said you could do in number 7 to determine the distance of your star and record **all** your data here. Parallax = Distance =

10. What is the actual distance of your “star” from point X? If you were off by a large amount, please provide your explanation.

