Introduction to LoggerPro— Email me all graphs on a single sheet of paper!
Word document needs names of everyone in the group, and each graph, best-fit line and equation clearly visible.

Scenario A: Plot the following data set collected from a car traveling at a constant speed of 5 m/s.

1. Write the equation for the best-fit line of this graph:

2. Use the graph (by changing the scale of the axes) to determine the distance the car would travel in 16 s?

3. Use the equation for the best-fit line to determine the distance the car would travel in 200 s?

Time (s) ± 0.1	Distance Travelled by Car (m) ± 1
0.0	0
1.0	5
2.0	10
3.0	15
4.0	20
5.0	25

Scenario B: Plot the following data gathered as a ball was dropped from rest from a cliff.

4. Write the equation for the best-fit line of this graph:

5. Use the equation for the best-fit line to determine the distance the ball will fall in 9 s? d = _____

6. Use the equation for the best-fit line to determine the time it would take the ball to fall 200 m? t = _____

7. Use the graph (by changing the scale of the axes) to determine the time it would take the ball to fall 200 m? t =____

Time (s) ± 0.2	Distance Ball fell from Cliff (m) ±0.5
0.0	0.0
1.0	5.0
2.0	20.0
3.0	45.0
4.0	80.0
5.0	125.0

8. Explain between the equation method or graph method which was easier to determine the time it would take the ball to fall 200m?

Scenario C: Plot the following data for a car that was moving at 30 m/s and then suddenly hit the brakes.

9. Write the equation for the best-fit line of this graph:

10. When will the car stop? t = _____

11. Where on the graph did you determine this?

12. Explain the meaning of the y-intercept of 30 m/s.

13. Determine when the car is going 23 m/s? t = _____

Average Time (s) ± 0.3	Speed of Car (m/s) ± 0.5
0.0	30.0
1.0	25.0
2.0	20.0
3.0	15.0
4.0	10.0