

Objective: Determine the mathematical relationship between the distance and the time for a ball rolling down a ramp.

Procedure –

- Using the data below, construct a graph that correctly displays the independent and dependent variables.

Time	Distance
0	0
23	10
66	20
86	40
107	70
144	100
146	150

Graph – Use logger pro to provide a sketch of the analyzed variables. Logger pro is available for a free download or you can use a classroom laptop.



Conclusions – Always answer these questions for a “relationship” lab.

1. What is the relationship between distance and time?
2. What is the general equation of the resulting line/curve?
3. What is the translated equation (*the equation that represents the data you graphed*)?
4. If you double the independent variable, specifically what happens to the dependent variable?