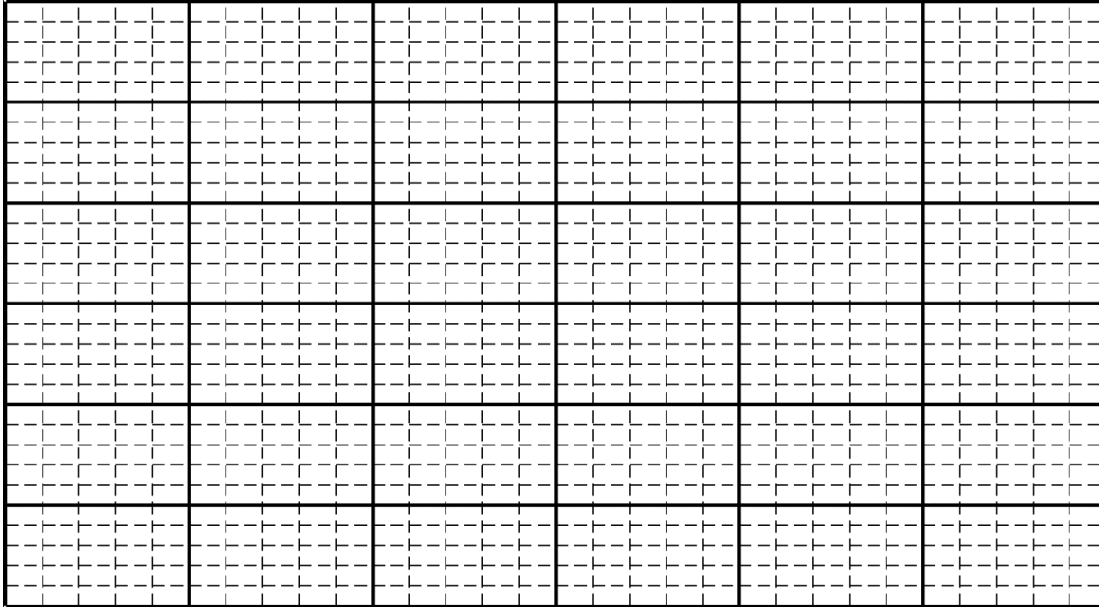


Wally the Astronaut

Name _____

Number _____

1. On the axes below, plot relevant data to make a straight line. Label both axes with both a description and units. Draw a steepest and shallowest best-fit line. (See quiz 92 for a description of the situation.)



2. Find the slope of the best-fit lines. Use two far-separated points on each best fit line that are NOT data points; circle those points on the graph. Show all calculations *including substitution with units*. **Then state a final slope with uncertainty (and, of course, proper units).**

- Derive a relevant equation relating d and t . Annotate your calculation with a description of your approach.
- Explain the physical meaning of the slope of the line with reference to the relevant equation.
- Calculate the force applied by the rocket from the slope of your graph. Compare to the force used in the simulation.