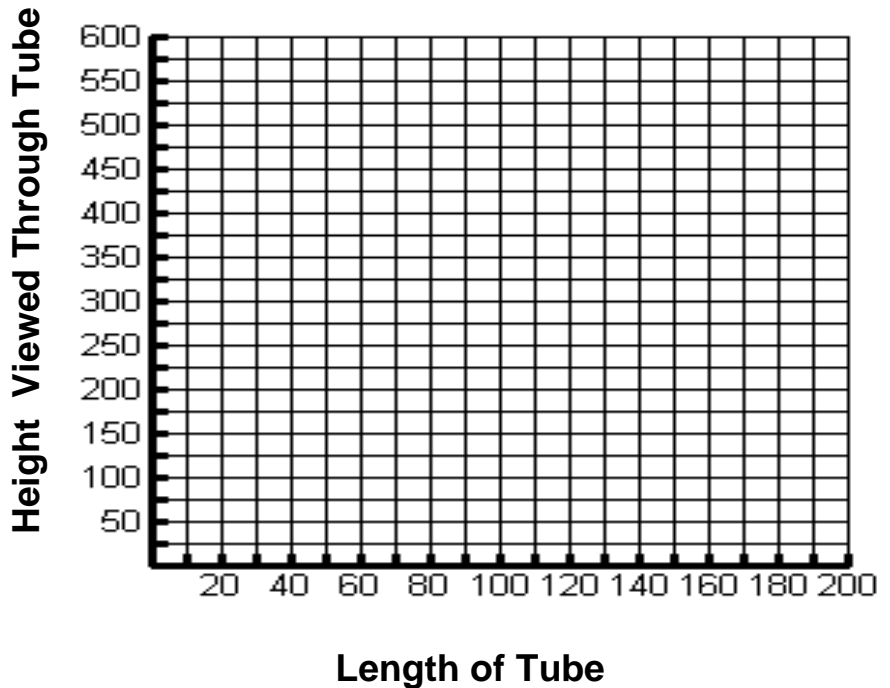# Illuminations Tube Viewer Simulation
Inverse Variation

Go to the site indicated above and use the Tube Viewer Simulation.

Move the man to a distance of 200 cm from the wall and leave him there. Change the length of the viewing tube and record the height viewed on the wall through the tube. Plot the data points.

Length of Tube (cm)	Height Viewed through Tube (cm)
2	
4	
10	
25	
50	
75	
100	
125	
150	
170	
190	
195	
200	

Length of Tube

1.   Does this data belong to the same family of functions as Activities 1 and 2? If so, explain why. If not, to what family of functions does this data appear to belong?

2.   Is there a y-intercept to the line/curve that goes through this data? If so, what is it?

3   If a curve best fits this data, is there an asymptote?

4.   Write an equation that models the data.

5.   Using your equation, find the length of the tube when the viewed height is 100 cm. Then, locate this point on the graph.