

Name _____ Date _____

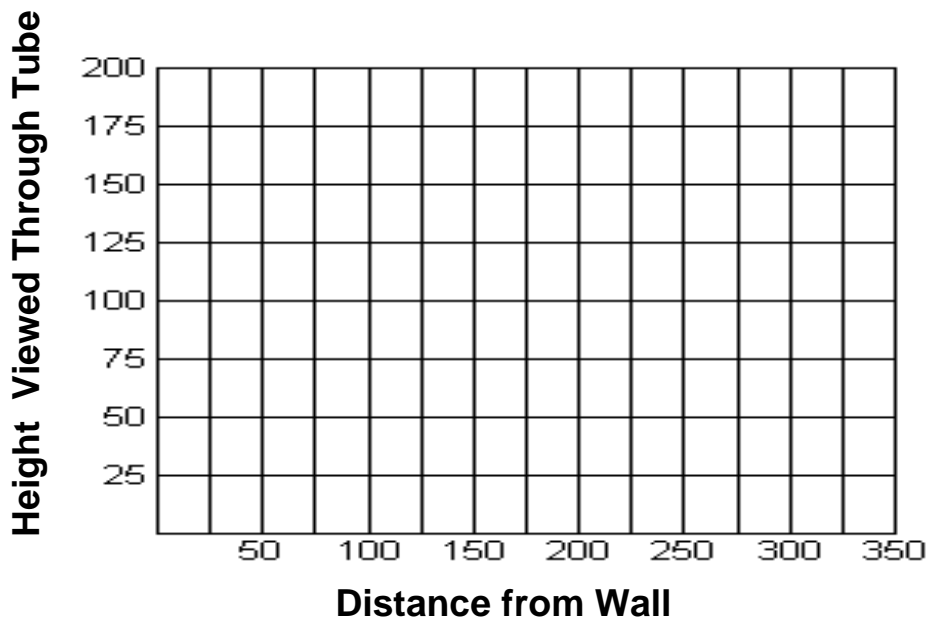
Illuminations Tube Viewer Simulation Direct Variation

<http://illuminations.nctm.org/ActivityDetail.aspx?ID=41>

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

With the length of the viewer tube as 10 cm, move the man further back and record the height viewed through the tube. Plot the data points.

Distance from Wall (cm)	Height Viewed through Tube (cm)
25	
50	
75	
100	
125	
150	
175	
200	
225	
250	
275	
300	
325	



1. To what family of functions does this data appear to belong?
2. Find the slope of the line/curve that contains the data.
3. Use the pattern and go backward to find the y-intercept.
4. Write an equation that models the data.
5. Using your equation, find the distance from the wall when the viewed height is 80 cm. Then, locate this point on the graph.