

Determining Relationships from Graphs

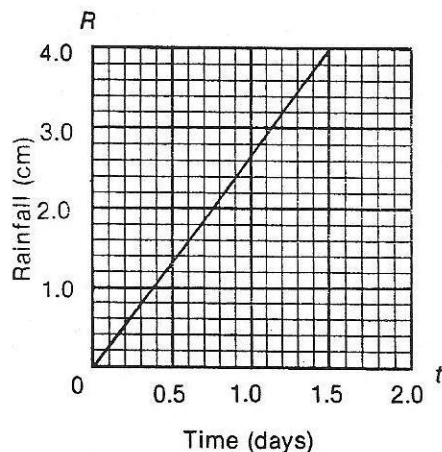
Data collected in the lab is often plotted and analyzed graphically. When the curve of the graph is a straight line, the equation for the relationship between the variables y and x is

$$y = mx + b$$

where m is the slope of the line and b is the y -intercept.

Determine the slope and equation for each graph given below. The first graph has been done as an example.

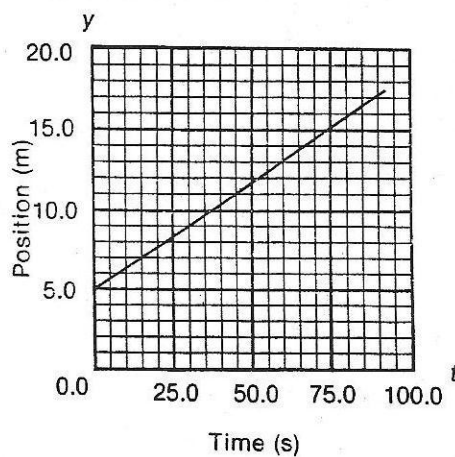
Rainfall versus Time



slope: 2.7 cm/d

equation: $R = (2.7 \text{ cm/d}) \cdot t$

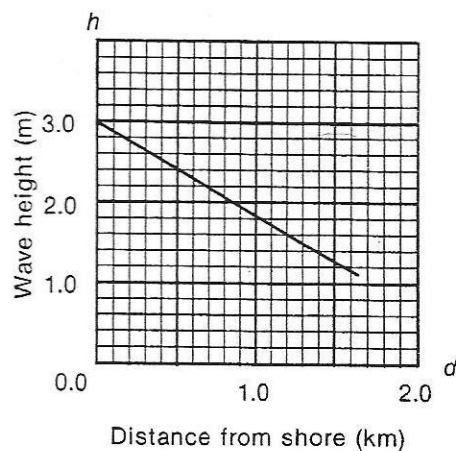
Position versus Time



slope: _____

equation: _____

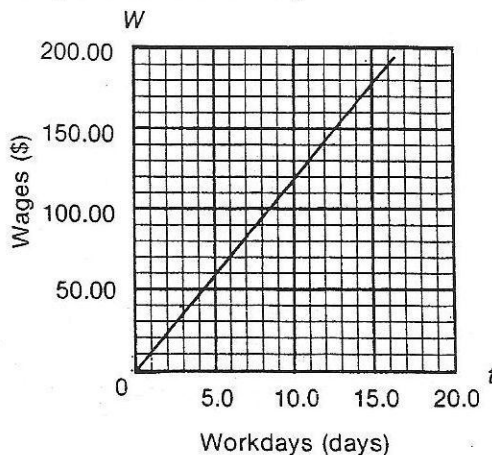
Wave Height versus Distance



slope: _____

equation: _____

Wages versus Workdays



slope: _____

equation: _____