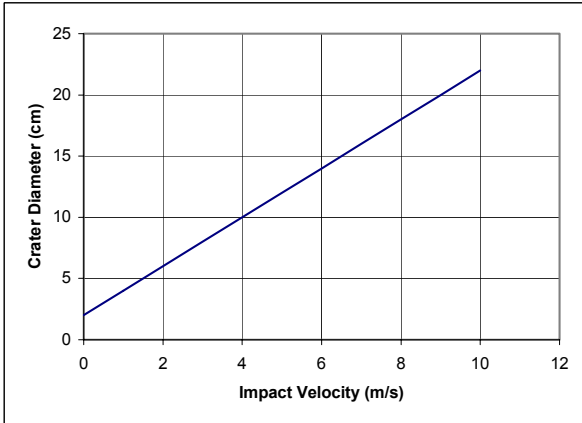


Designing Craters: Creating a Deep Impact

Finding a Formula for a Line

OVERHEAD TRANSPARENCY

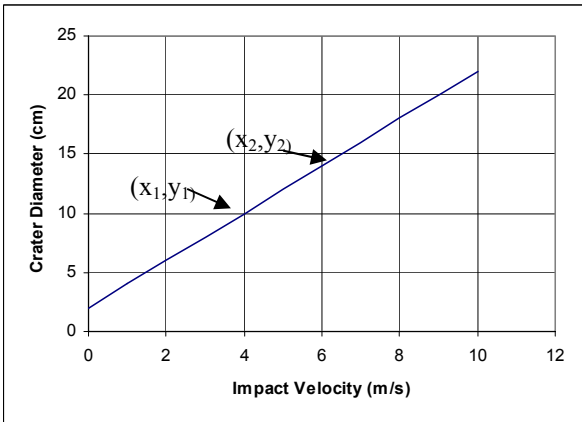
Lines can be represented by formulas



$$y = mx + b$$

(x,y) = Ordered Pair
 m = Slope of Line
 b = y-intercept

Step 1: Find the slope by finding two points on the line.

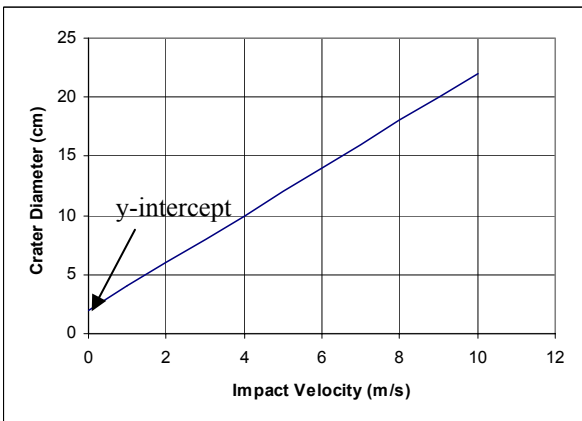


m = slope of the line
 m = rise/run
 $m = (y_2 - y_1) / (x_2 - x_1)$

In this example:

$m = (\quad) / (\quad)$

$m =$



Step 2: Find the y-intercept

b = y-intercept (place where the line crosses the y-axis)
 In this example, $b =$

Step 3: Find the Formula

Our formula, $y =$