

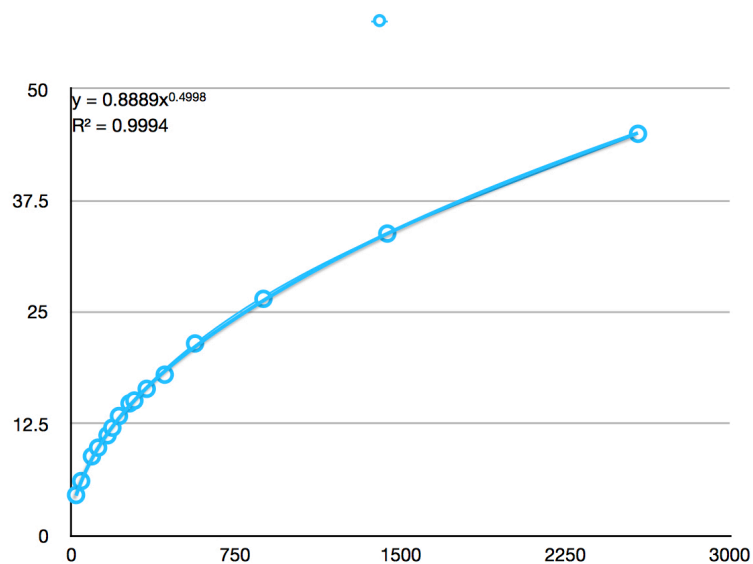
## Assignment 1

1. The relationship between  $d$ ,  $n$  and  $l$  is  $n \approx (d/l)^2$ .
2. In this program, I use 15  $n$  values and every program runs 2000 times to get the relationship of  $n$ ,  $d$  and  $l$ .

The following are the value of  $n$  and the value of  $d$ :

$n$	$d$
25	4.520773226
48	6.082426265
97	8.857520179
125	9.824414736
168	11.2068634
190	12.05820671
220	13.36354875
268	14.78194651
290	15.09861898
346	16.40973578
428	17.99536035
566	21.48982592
877	26.48834763
1440	33.79692003
2580	44.97235406

We can get a chart, as the following show:



4.

