Number Produced	Cost per item
10	2.35
50	2.22
100	2.11
150	2.01
200	1.98

Linear function which is the best fit to above data:

Predicted cost per item if producing 1000 items:

Using the inverse of the best fit, predict how many items were produced:

Cost per Item	Expected Number Produced:
1.78	
1.68	
1.58	
1.48	

Plot the parabola: P(x)=x^2+5x-10 and locate the zeros accurate to the one's digit

x	P(x)
-10	
-9	
-8	
-7	
-6	
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Plot f(x)= 8^x from -10 to 10 and also compute the log base 8 of f(x)

x	f(x)=8^x	f^-1(x)=log_8(x)
-10		
-9.5		
-9		
-8.5		
-8		

-7.5
-7
-6.5
-6
-5.5
-5
-4.5
-4
-3.5
-3
-2.5
-2
-1.5
-1
-0.5
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
5.5
6
6.5
7
7.5
8
8.5
9
9.5
10