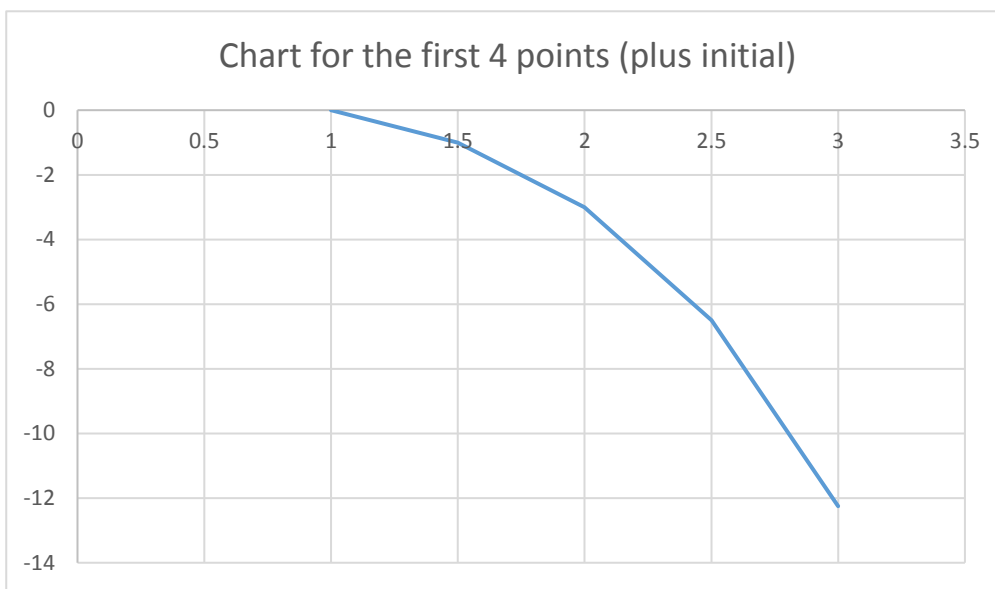
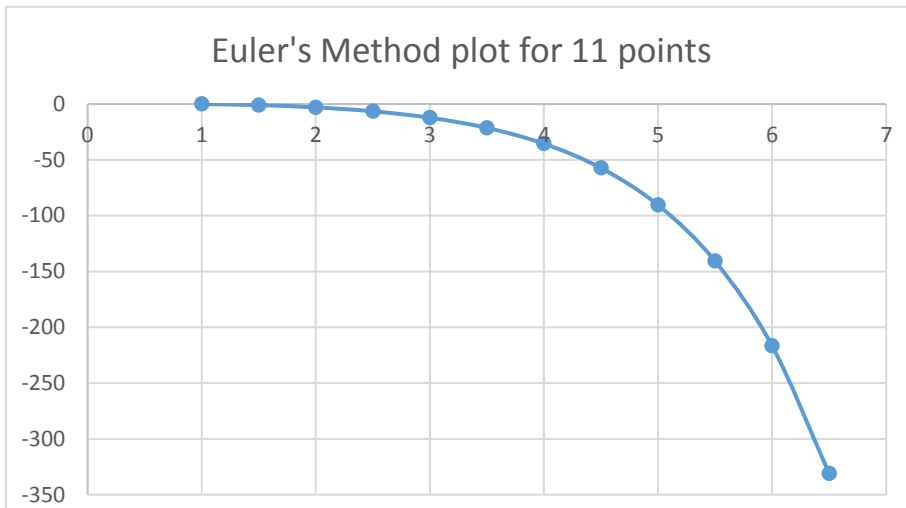


21. Use Euler's method with step size 0.5 to compute the approximate y -values $y_1, y_2, y_3,$ and y_4 of the solution of the initial-value problem $y' = y - 2x, y(1) = 0$.

k	x_k
0	1
1	1.5
2	2
3	2.5
4	3
5	3.5
6	4
7	4.5
8	5
9	5.5
10	6
11	6.5



y_k		$y_{k+1} = y_k + h \cdot (y_k - 2x_k)$
0		-1
-1		-3
-3		-6.5
-6.5		-12.25
-12.25		-21.375
-21.375	-35.5625	
-35.5625	-57.3438	
-57.3438	-90.5156	
-90.5156	-140.773	
-140.773	-216.66	
-216.66	-330.99	
-330.99	-502.985	

h

0.5