

AN EXAMPLE OF EULER'S METHOD

$h = 0.25$	$f(t, x) = tx$	$(t_0, x_0) = (1, 1)$
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t	x	$f(t, x)$	$f(t, x) \times h$	Approximate x	$t + h$
1	1	1	0.25000	$1 + 0.25000$	1.25
1.25	1.25000	1.56250	0.390625	$1.25000 + 0.390625$	1.50
1.50	1.64062	2.46094	0.61523	$1.64062 + 0.61523$	1.75
1.75	2.25583	3.94771	0.98693	$2.25583 + 0.98693$	2.00
2.00	3.24276	6.48552	1.62138	$3.24276 + 1.62138$	2.25
2.25	4.86414	10.94432	2.73608	$4.86414 + 2.73608$	2.50
2.50	7.60022	19.00055	4.75014	$7.60022 + 4.75014$	2.75
2.75	12.35036	33.96348	8.49087	$12.35036 + 8.49087$	3.00
3.00	20.84123	—	—	—	—

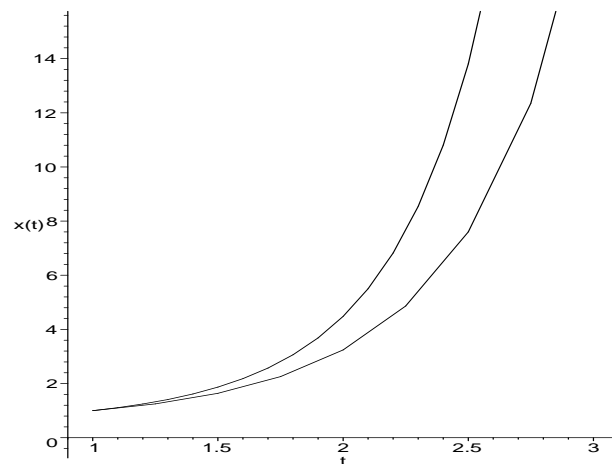


Figure 1: Comparison of True Solution and Euler Approximation