

$$x' = -(x \wedge (2/3)) + 3 * F = f$$
$$f(x_i, t_i) = -x_i^{2/3} + 3 \cdot F_i$$

Fi+1

$$f(x_{i+1}, t_{i+1}) k_2$$
$$x' = -(x \wedge (1/3)) + 2^*(F) \wedge 2 = f$$
$$f(x_i, t_i) = \frac{f(x_{i+1}, t_{i+1}) + f(x_{i-1}, t_{i-1})}{2} + \frac{f(x_{i+1}, t_i) + f(x_{i-1}, t_i)}{2} + \frac{f(x_i, t_{i+1}) + f(x_i, t_{i-1})}{2} + \frac{f(x_{i+1}, t_{i+1}) + f(x_{i-1}, t_{i+1}) + f(x_{i+1}, t_{i-1}) + f(x_{i-1}, t_{i-1})}{4} \cdot \Delta x \cdot \Delta t$$
$$x' = -1^*(x^{\wedge}(1/2)) + (F)^{\wedge}2 = f$$

```
t xi delt Fi=2sin3ti f(xi,ti)= k1=delt*f ti/2=ti+delt/2 xi/2=xi+k1/2 xim=xi+0.5*0.1*f Fim=sin3t f(xim,tim)
```

0	0.75	0.1	0	-0.866025404	0.1	-0.08660254	0.05	0.70669873	0.70669873	0.28876	-0.75133	-0.07513
0.1	0.675	0.1	0.591040413	-0.47217432	0.2	-0.047217432	0.15	0.651258611	0.651258611	0.89931	-0.05023	-0.00502
0.2	0.67	0.1	1.12928947	0.456844061	0.3	0.045684406	0.25	0.692686941	0.692686941	1.38278	1.026247	0.102625
0.3	0.772	0.1	1.566653819	1.57550176	0.4	0.157550176	0.35	0.851244569	0.851244569	1.74846	2.087063	0.208706

Mod Euler

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t_xi      delt Fi=2cot3ti      f(xi,ti)      ti+1      xi+1=xi+0.1*fj      Fi+1=2cot3ti+1      f(xi+1,ti+1)      xi+1=xi+delt*(f(xi,ti)+f(xi+1,ti+1))/2

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[illegible]