

n	h	μ_n	$y(1) - \mu_n = \alpha$	α/h
1	0.10	29.190	-23.75	-2.375×10^5
2	0.10	35.43	-29.99	-2.999×10^5
1	0.05	1.105	4.332	6.931×10^5
2	0.05	1.219	4.218	6.748×10^5
1	0.001			
2	0.001			

$$f(y) = 2y$$

BUT THE
VALUES ARE
ERASED HERE

* ACCIDENTALLY ERASED WORK
FOR $h = 0.10$

$$h = (0.001)$$

$$\mu_1 = \mu_0 + \frac{h}{6} (k_1 + 2k_2 + 2k_3 + \dots + k_4)$$

$$\rightarrow k_1 = f(\mu_0) = 2.1 = k_1$$

$$k_2 = f\left(\mu_0 + \frac{h}{2} k_1\right)$$

$$= 2 \cdot \left(1 + \frac{0.001}{2} \cdot 2\right)$$

$$k_2 = 2.002$$

$$y(1) - \mu_1 = 2e^{-1.105}$$

$$= 4.332 = \alpha'$$

$$y(1) - \mu_2 = 2e^{-1.219}$$

$$= 4.218 = \beta$$

$$\frac{\alpha'}{h^4} = \frac{4.332}{0.05^4} = 6.931 \times 10^5$$

$$\frac{\beta}{h^4} = \frac{4.218}{0.05^4} = 6.748 \times 10^5$$

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 $k_1 = f(\mu_0)$
 $k_2 = f(\mu_0 + \frac{h}{2} k_1)$