



		1	4	2	4	1
x		1	1.5	2	2.5	3
9^{x-1}		1	3	9	27	81

$$\begin{aligned}
 V &= \pi \int_1^3 y^2 dx \\
 &= \pi \int_1^3 9^{x-1} dx \\
 &= \pi \times \frac{h}{3} \left\{ y_0 + 4y_{\text{odd}} + 2y_{\text{even}} + y_n \right\} \\
 &= \frac{\pi}{6} \left\{ 1 + 4(3+27) + 2(9) + 81 \right\} \\
 &=
 \end{aligned}$$

$$12/ \quad L = \int_a^b \sqrt{1 + (f'(x))^2} dx$$

$$= \int_0^2 \sqrt{1 + 4x^2} dx$$

		1	4	2	4	1
x	0	$\frac{1}{2}$	1	$\frac{3}{2}$	2	
$f(x)$	1	$\sqrt{2}$	$\sqrt{5}$	$\sqrt{10}$	$\sqrt{17}$	

$$= \frac{h}{3} \left\{ y_0 + 4y_{\text{odd}} + 2y_{\text{even}} + y_n \right\}$$

$$= \frac{1}{6} \left(1 + 4(\sqrt{2} + \sqrt{10}) + 2\sqrt{5} + \sqrt{17} \right)$$

$$=$$

$$\int_0^4 x(4-x)^4 dx$$
$$= \int_0^4 (4-x)x^4 dx$$