$\frac{1}{n} \longrightarrow ?$ TABLE :

n	h	$U_n \approx$	$y(1) - U_n$	$\dfrac{y(1) - U_n}{h}$
10	0.1	2.67	0.1245	
20	0.05	2.65	0.0650	
40	0.025	2.69	0.0332	0 8 0
80			0.0168	
	0.0125	2.70		

SO IT MUST BE THAT,

1) $\lim\limits_{n \to \infty} U_n = y(1)$ $\longrightarrow$ SO THAT THE METHOD CONVERGES...

2) $U_n = y(1) + \Theta(h)$ $\longrightarrow$ METHOD IS 1ST ORDER ACCURATE...