

## Practical 2 Rubric

### Example 1

$u_n$  plots  $k = 1, \dots, 7$  8 points

Error table	k	n	$u_n(x_0)$	Order
	1	$n_1$	$u_n(x_0)_1$	—
	⋮	⋮	⋮	—
	7	$n_7$	$u_n(x_0)_7$	order <sub>3</sub>
				⋮
				order <sub>7</sub>

8 points

Order of convergence : 9 points

### Example 2

manufactured solution  $u_m$  5 pts

$u_n$  plots  $k = 1, \dots, 7$  5 pts

$e_n = u_n - u_m$  plots  $k = 1, \dots, 7$  5 pts

Error table	k	n	$L^2$	$L^\infty$	Order $L^2$	Order $L^\infty$
	1	$n_1$	$L^2_1$	$L^\infty_1$	—	—
	⋮	⋮	⋮	⋮	Order <sub>3</sub>	Order <sub>3</sub>
	7	$n_7$	$L^2_7$	$L^\infty_7$	⋮	⋮
					Order <sub>7</sub>	Order <sub>7</sub>

5 pts

Order of convergence for  $L^2$  and  $L^\infty$  5 pts