Worksheet for the Third - Order Taylor Method

Initial Value Problem:

$$\frac{dy}{dx} = y() = y'' = y^{(3)} = y^{(3)} = y$$

step size: h =

$$\frac{1}{2}h^2 = \frac{1}{6}h^3 =$$

x_n	\mathcal{Y}_n	y'	y''	y'''	hy'	$\frac{1}{2}h^2y''$	$\frac{1}{6}h^3y'''$	Δy
						-	V	

$$\Delta y = hy' + \frac{1}{2}h^2y'' + \frac{1}{6}h^3y^{(3)}$$