16 $y' = 2y$, $y(0) = y_0 = 1 = v_0$

$= f(y)$, $h = 0.1$

$k_1 = f(v_n)$

$k_2 = f(v_n + hk_1)$

$v_{n+1} = v_n + \frac{h}{2}(k_1 + k_2)$

$v_1 = v_0 + \frac{h}{2}(2v_0 + 2(v_0 + 2hv_0))$

$= v_0 + hv_0 + hv_0 + 2h^2 v_0$

$= v_0(1 + 2h + 2h^2)$

$= 1(1 + 2 \cdot 0.1 + 2 \cdot (0.1)^2) = 1.22$

$v_2 = v_1(1 + 2h + 2h^2)$

$= 1.22(1 + 2 \cdot 0.1 + 2 \cdot (0.1)^2) = 1.4884$