

M353 6.6 back Euler (S. Zhang) .

1. (6.6:a1)

$$y' = 1 - 20y, \quad 0 \leq t \leq 0.2; \quad y(0) = 1/2$$

- (1) Solve the IVP,
- (2) Apply Euler $h = 0.1$, find error.
- (3) Apply backward Euler with $h = 0.1$, find error.
- (4) Apply backward Euler with $h = 0.2$, find error.
- (4) Apply extrapolation on the backward Euler data, find error.