## ${ m CS~374:Computational~and~Numerical~Methods}$ Set 14

TRAPEZOIDAL AND HENN'S METHOD

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## Y'(X) = -Y(X) with Y(0) = 1

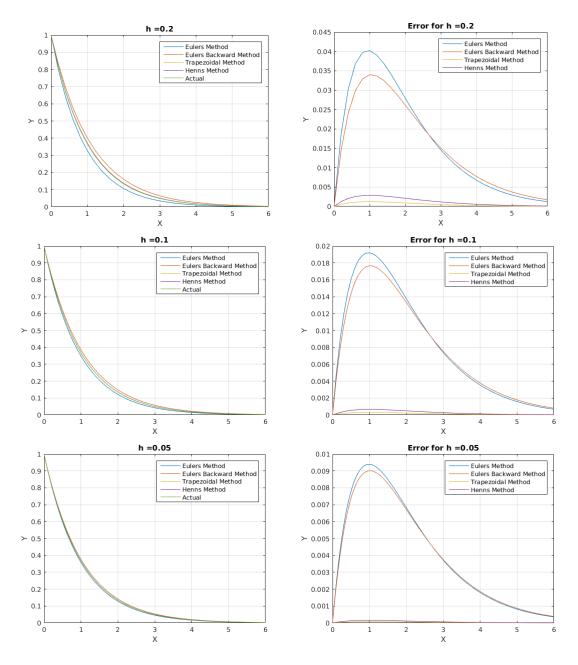


Figure 1: Comparison of the Trapezoidal and Henn's Method with the Euler and the Backward Euler Method

## **2** $Y'(X) = \frac{Y(X) + X^2 - 2}{X + 1}$ with Y(0) = 2

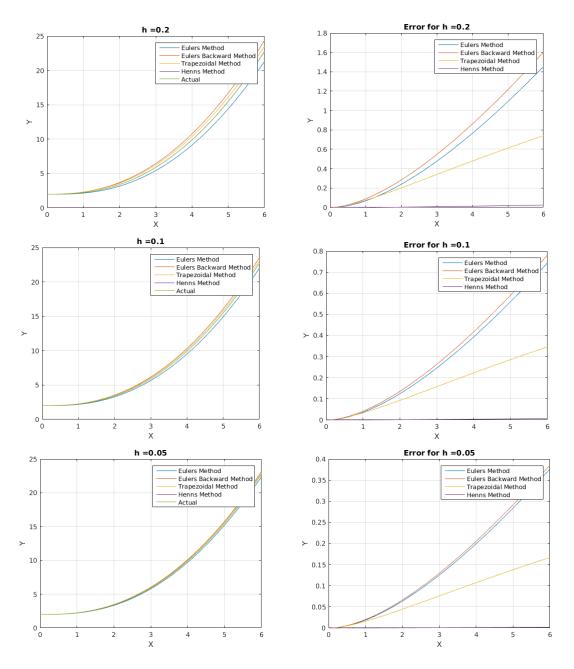


Figure 2: Comparison of the Trapezoidal and Henn's Method with the Euler and the Backward Euler Method