

3b

$$U_4' = U_3' + \frac{h}{2}(2U_3' + 2U_4')'$$

$$n=3, k=0$$

$$U_4' = U_3' + 2hU_3' \approx 4.68731$$

$$U_4' \approx 4.95516$$

$$U_4' = U_3' + \frac{h}{2}(2U_3' + 2U_4')'$$

$$n=3, k=1$$

$$\approx 5.00873 = U_4'$$

$$U_5' = U_4' + \frac{h}{2}(2U_4' + 2U_5')'$$

$$n=4, k=0$$

$$U_5' = U_4' + 2hU_4' \approx 7.01222$$

$$U_5' \approx 7.41292$$