CFRM 462: Introduction to Computational Finance and Financial Econometrics Homework $\mathbf{1}$

- 1. $\frac{27-31.18}{31.18} = -.134$
 - a) If you invested \$10,000 then would lose 10,000 * -.134 and your investment would be worth 10,000 * (1-.134) = \$ 8659.39
- 2. ln(27) ln(31.18) = -.144

a)
$$e^{-.144} - 1 = -.134$$

- 3. $(1 .134)^{12} 1 = -0.822$
- 4. -.144 * 12 = -1.727
- 5. $R_t(12) = \frac{30.51 31.18}{31.18} = -0.0214$
 - a) The investment would be worth 10,000 * (1-.0214) = 9785.11. Compared to 3) the nominal amount is higher.
- 6. $\ln(30.51)$ $\ln(31.18)$ = -.0217 The cc return amount is higher than 4) because the ending balance is higher and it does not assume a monthly decline of 13.4%

a)
$$e^{-.0217} - 1 = -0.0214$$

PART II & III refer to supporting files