

Solution to Homework3

1.

- a. $CrCL=(140-age)*weight/70=(140-30)*70/70=110 \text{ mL/min}$
- b. $k_e=0.00293*CrCL+0.014=0.00293*110+0.014=0.3363 \text{ hr}^{-1}$
- c. $CL_T=k_e*V_d=0.3363*16.5=5.55 \text{ L/hr}$
- d. $k_{enonren}=0.014 \text{ hr}^{-1}$ and $CL_{nonren}=k_{enonren}*V_d=0.014*16.5=0.231 \text{ L/hr}$
- e. $CL_{ren}=CL_T-CL_{nonren}=5.55-0.231=5.319 \text{ L/hr}$
- f. $C=Dose/V_d*Exp(-K_e*t) \quad 5=100/16.5*Exp(-0.3363*t) \quad t=0.572\text{hr}$

2. B or B and D

3. A, C and D

4. a. False

b. False

c. False

d. False

e. False