**Worksheet # 12**

**Institutional Pharmacy Calculations**

**Learning Objectives**

1. Perform calculations required to compound, dispense and administer medications.
2. Perform calculations required to determine the appropriate dose for a patient based on weight, renal/liver function and other pharmacokinetic parameters of the drug and patient.
3. Assess accuracy of the calculations based on patient and drug specific parameters.

**Preceptor:** Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

1. During your experience you will need to find at least **2** examples of each of the following calculations that the pharmacist had to perform. Be sure to include all the necessary information pertaining to the calculation (may include a copy of a de-identified medication order if permitted) and solve the calculations in the space provided. Please show all of your work. Have your preceptor check each of the calculations for accuracy once you have completed your work.

* 1. Weight-based dosing:
  2. Ratio and proportion:
  3. Milliequivalents
  4. Percent strength
  5. Rate flow
  6. Ideal body weight and/or adjusted body weight
  7. Creatinine clearance for a man and woman
  8. Unit conversions

2. What steps does the pharmacist take to ensure the accuracy of the calculations (e.g. Does another pharmacist check their work)?