

INSTRUCTIONS: Using your knowledge of pharmaceutical calculations learned in PHARM 587 and the Calculations Tips sheet, complete the following questions. **BE SURE TO SHOW ALL OF YOUR WORK** so that we can see how you derived your answers. No credit will be given if work is not shown.

What does TPN stand for? (1 pt)

The TPN order you received requests the following additives:

Potassium Phosphate 10mmol
 Ascorbic Acid 1000mg
 Insulin 15 units
 Sodium Chloride 80mEq
 Calcium Gluconate 10mEq
 Potassium Chloride 35mEq

The PCLC Pharmacy has the following products are available for you to make a TPN. Calculate the amount of each product that you would add to the TPN (*remember to round to the appropriate quantity that you can measure*). (1 pt each)

KPhos (3mmol/ml or 4.4mEq/ml) _____ **ml KPhos**

Vit C 500mg/ml _____ **ml Vit C**

Humulin-R U-100 _____ **ml HumR**

NaCl 23.4% (4mEq/ml) _____ **ml NaCl**

CaGluc 10% 23.25mEq/50ml _____ **ml CaGluc**

KCl (2mEq/ml) _____ **ml KCl**

The order requests base solutions of 500ml of amino acids 5.5% and 500ml D50W (50% dextrose in water). Assume that the entire volume of the dextrose and amino acid solutions are combined. (Hint: *remember to include the additive volumes from above*) (1.5 pts each)

What will the final dextrose concentration be? _____%

What will the final concentration of amino acids be? _____%