acid/base	acid = donor base = acceptor
Alligation	higher % \ / parts of higher % desired% lower % / \ parts of lower % add parts to find total # of parts
BMI	(weight kg)/(height m2)
BSA in m2	sq root of [Ht(cm) x wt (kg)/3600]
Ca carbonate to Ca citrate conversion	Ca carbonate is 40% Ca citrate is 21%
Corrected calcium	Ca(corrected) = Ca(serum) + [(4.0 - albumin) x (0.8)] normal Ca = 8.5-10 mEq/L normal Albumin = 3.5-5 g/dL
CrCl	(140-age)/(72 x Cr) x (wt in kg) x 0.85 if female
half life	t(1/2) = 0.693/ke ke = elimination constant
IBW	males= 50kg + 2.3kg (inches over 5 ft) females= 45.5kg + 2.3kg (inches over 5 ft)
kcal 10% fat emulsion	1.1 kcal/mL
kcal 20% fat emulsion	2 kcal/mL
kcal Dextrose	3.4 kcal/g
kcal lipids	9 kcal/g
kcal protein/amino acids	4 kcal/g
milliequivalents	mEq = mg x valence /MW
Osmolarity	mOsm/L= [(conc g/L)/MW] x (# of species) x 1000
signs of acidosis	pH < 7.5 inc. Cl dec. Bicarb if acidotic use at least 50% Na acetate, instead of NaCl
signs of alkalosis	pH>7.45 dec. Cl inc. Bicarb
Specific Gravity	weight in g / volume in mL 1.1g of H2O = 1 mL of water
strength adjustments	Q1C1=Q2C2 quantity and concentration
temperature conversion	F -> C T-32/1.8 C ->F T(1.8) + 32
water requirements in TPN	calculated first to avoid or correct volume depletion or overload
weak acid	pH = pKa + log (salt/acid)
weak base	pH = pKw -pKb + log (base/salt) pKw = 14