Problems in Conversion

1) The density of propane is $36.28\frac{lb}{ft^3}$, convert this to$\frac{Kg}{m^3}$?
   Knowing $1lb = 454g$, $1in = 2.54cm$ and$1ft = 12in$
   ans 581.672

2) A certain medication is set to deliver through an IV at a rate of $3\frac{mg}{min}$. what is this rate in $\frac{ng}{s}$?
   ans 5×10^4

3) A drug is administered at a rate of $14.5\frac{cL}{hour}$ .what is this rate in $\frac{\mu L}{s}$?
   ans 40.3

4) An automobile tire has a pressure of $32psi$ that is in $\frac{pounds}{in^2}$, what is the pressure in $\frac{g}{cm^2}$?
   Knowing $1lb = 454g$, $1in = 2.54cm$
   ans 2.3×10^3

5) If $1g$ of Ammonia (as NH_3) is equal to $0.005587\ mol$, express $1\frac{mg}{dL}$ of Ammonia in terms of $\frac{\mu mol}{L}$?