Answer on Question # 70309, Chemistry / General Chemistry

I am about to start my research work but i want to 1stly calculate the amount of nanoparticles from 20.1mmol of zinc acetate and 2.4mmol of cobalt nitrate and 140mmol of KOH?

Solution:

$$N = n \times N_A$$
$$N((CH_3COO)_2Zn) = 20.1 \times 10^{-3} \times 6.02 \times 10^{23} = 12.1 \times 10^{21}$$
$$N(Co(NO_3)_2) = 2.4 \times 10^{-3} \times 6.02 \times 10^{23} = 14.4 \times 10^{20}$$
$$N(KOH) = 140 \times 10^{-3} \times 6.02 \times 10^{23} = 842.8 \times 10^{20}$$