Session #1: Homework Solutions

Problem #1

Calculate the molecular weight of each of the substances listed:

NH_4OH, $NaHCO_3$, CH_3CH_2OH

Solution

NH_4OH: 5 x 1.01 = 5.05 (H)
1 x 14.01 = 14.01 (N)
1 x 16.00 = 16.00 (O)

NH_4OH = 35.06 g/mole

$NaHCO_3$: 3 x 16.00 = 48.00 (O)
1 x 22.99 = 22.99 (Na)
1 x 1.01 = 1.01 (H)
1 x 12.01 = 12.01 (C)

$NaHCO_3$ = 84.01 g/mole

CH_3CH_2OH: 2 x 12.01 = 24.02 (C)
6 x 1.01 = 6.06 (H)
1 x 16.00 = 16.00 (O)

CH_3CH_2OH: 46.08 g/mole

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