Chapter 7 Problem IV	Na	me
 Calculate the % composition a) C₂H₆ 	n: b) NaHSO₄	c) NH₄Cl
32. Calculate the % compositiona) CO(NH₂)₂	n of nitrogen in the followin b) NH ₃	ng compounds: c) NH₄NO₃
33. Using Problem 31, calculate a) 350 g C_2H_6	the mass of hydrogen in b) 20.2 g NaHSO4	each of the following: c) 2.14 g NH ₄ Cl
34. Calculate the grams of nitroc a) CO(NH ₂) ₂	gen in 125 g of each fertil b) NH ₃	izer. c) NH₄NO₃
35. Calculate the empirical form a) 94.1% O, 5.9% H	ula of each compound. b) 79.8%	C, 20.2% H
c) 67.6% Hg, 10.8% S, 21.6% O	d) 27.59%	ь С, 1.15% Н, 16.09% N, 55.17% О
37. Find the molecular formula of each compound given its empirical formula. a) CH_3O , molar mass = 62 g/mol b) C_3H_2CI , molar mass = 147 g/mol		
38. Which pair of molecules has the same empirical formula? a) $C_2H_4O_2$, $C_6H_{12}O_6$ b) NaCrO ₄ , Na ₂ Cr ₂ O ₇		
43. Which of the following molec a) $C_5H_{10}O_5$ b) C_6	tular formulas are also em $H_{12}O_2$ c) $C_{55}H_{72}N$	npirical formulas? /IgN4O5 d) C ₁₂ H ₁₇ ON
62. Which of the following composition a) FeCl₂b) Fe	bund has the highest iron $(C_2H_3O_2)_3$ c) F	content? Fe(OH) ₂ d) FeO