Recitation - Week 12 (3rd for test 3)

Table of Contents

[CH101-008 UA Fall 2016](/CH101-008/)

[About](/CH101-008/about/)

# Recitation - Week 12 (3rd for test 3)

Nov 5, 2016

* 1) Determine the molarity of a solution formed by dissolving 468 mg Of M812 in enough water to yield 50.0 mL
  + A) 0.0297 M
  + B) 0.0337 M
  + C) 0.0936 M
  + D) 0.0107 M
  + E) 0.0651 M
* 2) Identify acetic acid.
* A) strong electrolyte, weak acid
* B) weak electrolyte, weak acid
* C) strong electrolyte, strong acid
* D) weak electrolyte, strong acid
* E) nonelectrolyte
* 3) Give the net ionic equation for the reaction (if any) that occurs when aqueous solutions of HOSOA and KOH are mixed.
  + A) H+(aq) + oH-(aq) -> H2O(l)
  + B) 2 K+(aq) + SO4^2-(aq) -> K2SO4(s)
  + C) H+(aq) + OH-(aq) + 2 K+(aq) + SO4^2-(aq) -> H2O(l) + K2SO4(S)
  + D) H2^2+(aq) + OH-(ao) -> H2(0H)2(l)
  + E) No reaction occurs.
* 4) Pure acetic acid (CH3COOH) is a liquid and is known as glacial acetic acid. Calculate the molarity of a solution prepared by dissolving 15.00 mL of glacial acetic acid at 25°C in sufficient water to give 500.0 n1L of solution. The density of glacial acetic acid at 25°C is 1.05 g/mL.
  + A) 1.89 \* 10^3 M
  + B) 31.5 M
  + C) 0.0315 M
  + D) 0.525 M
  + E) 5.25 \* 10^-4M
* 5) When 7.80 mL of 0.500 M AgNO3 is added to 6.25 mL of 0.300 M NH4Cl, how many grams of AgCl are formed?
  + AgN03(aq) + NH4Cl(aq) -> AgCl(s) + NH4NO3(aq)
  + A) 0.269 g
  + B) 0.553 g
  + C) 0.822 g
  + D) 1.61 g
* 6) Which of the following compounds will undergo a gas-evolving reaction in an aqueous solution?
  + A) CH3COOH
  + B) HF
  + C) HCl
  + D) H2SO4
  + E) H2CO3
* 7) Determine the concentration of a solution prepared by diluting 20.0 mL of a 0.200 M KCl to 250.0 mL.
  + A) 0.l60 M
  + B) 0.0320 M
  + C) 2.50 M
  + D) 0.00800 M
  + E) 0.0160 M
* 8) What mass (in g) of AgCl is formed from the reaction of 75.0 mL of a 0.078 M AgC2H302 solution with 55.0 mL of 0.109 M MgCl2 solution?
  + 2 AgC2H3O2(aq) + MgCl2(aq) -> 2 AgCl(S) + Mg(C2H3O2)2(aq)
  + A) 0.838 g
  + B) 1.72 g
  + C) 0.859 g
  + D) 2.56 g
  + E) 1.70 g
* 9) Give the net ionic equation for the reaction (if any) that occurs when aqueous solutions of K2S and Fe(NO3)2 are mixed.
  + A) K+(aq) + N03-(aq) -> KNO3(s)
  + B) Fe2+(aq) + S2-(aq) + 2 K+(aq) + 2 N03-(aq) -> FeS(s) + 2 K+(aq) + 2 NO3-(aq)
  + C) Fe2+(aq) + S2-(aq) + 2 K+(aq) + 2 N03-(aq) -> Fe2+(aq) + S2-(aq) + 2 KNO3(s)
  + D) Fe2+(aq) + S2-(aq) -> FeS(s)
  + E) No reaction occurs
* 10) All of the following compounds are soluble except
  + A) Ba(OH)2
  + B) Pb(NO3)2
  + C) ZnCl2
  + D) AgBr
  + E) Cu(C2H3O2)2
* 11) Two samples of potassium iodide are decomposed into their constituent elements. The first sample produced 13.0 g of potassium and 42.3 g of iodine. If the second sample produced 24.4 kg of potassium, how many kg of iodine were produced?
  + A) 13.3 kg
  + B) 22.5 kg
  + C) 79.4 kg
  + D) 44.4 kg
  + E) 92.4 kg
* 12 Determine the number of grams H2 formed when 250.0 mL of 0.743 M HCl solution reacts with 3.41 \* 10^23 atoms of Fe according to the following reaction
  + 2HCl(aq) + Fe(s) -> H2(g) + FeCl2(aq)
  + A) 0.374g
  + B) 1.33g
  + C) 1.l4g
  + D) 0.l87g
  + E) l.5l g

Please enable JavaScript to view the [comments powered by Disqus.](https://disqus.com/?ref_noscript)

## CH101-008 UA Fall 2016

* CH101-008 UA Fall 2016
* [jmbeach1@crimson.ua.edu](mailto:jmbeach1@crimson.ua.edu)
* jmbeach
* hey\_beach

Notes and study materials for The University of Alabama's Chemistry 101 course offered Fall 2016.