Questions 1-3

1) You are being called to place a lethargic patient on Noninvasive positive pressure ventilation (NIPPV) for severe hypercapnia. His ABG: Ph 7.30, PaCO2 95, PaO2 78, HCO3 45.
   Would NIPPV is appropriate to help this patients' lethargy?
   A) Yes
   B) No

2) What is the baseline PaCO2 for this patient?
   A) 30
   B) 50
   C) 70
   D) 90

3) After 1 hour of NIPPV, the patient remains lethargic, PaCO2 is now 50. PH now is expected to be?
   A) 7.2
   B) 7.3
   C) 7.4
   D) 7.5
   E) 7.6

Questions 4-6

4) An 18 year old patient with DKA and complaining of shortness of breath. His ABG: PH 7.2, PaCO2 14, PaO2 80, HCO3 8.
   Is the patient compensating well and PaCO2 appropriately low?
   A) Yes
   B) No

5) What is the expected PaCO2 in that patient?
   A) 10
   B) 15
   C) 20
   D) 25

6) What is the Acid-Base balance in this patient?
   A) Primary metabolic acidosis
   B) Primary respiratory alkalosis
   C) Primary metabolic acidosis and respiratory alkalosis
   D) Primary metabolic alkalosis and respiratory alkalosis

7) You are assessing a patient with COPD exacerbation getting ready for intubation after failing NIPPV. His ABG with PH 7.1, PaCO2 80, PaO2 60, HCO3 of 23, his Potassium is 6.5 meq/l, lactic acid 2, renal functions normal. ECG with no arrhythmias. Best treatment for hyperkalemia in this patient is?
   A) Emergent dialysis
   B) Nebulized bronchodilators
   C) Intravenous Calcium
   D) Emergent Intubation

8) A seventeen year old patient who ingested 100 tablets of aspirin 325 mg and markedly obtunded, with extremely high aspirin level. PH 6.9, HCO3 5. PaCO2 is expected to be?
   A) < 12
   B) 13-15
   C) 15-20
   D) > 20

9) 80 year old presented with repeated vomiting and dehydration for last 3 days. His ABG is is PH 7.52, PaCO2 55, HCO3 40. This patients' acid-base balance is:
   A) Primary metabolic alkalosis
   B) Primary metabolic alkalosis and respiratory acidosis
   C) Primary respiratory acidosis
   D) Primary respiratory acidosis with metabolic acidosis

10) 84 years old male with congestive heart failure who is being treated with diuretics. His ABG initially was PH 7.38, PaCO2 38, HCO3 25, PaO2 60 on RA. Today PH 7.55, PaCO2 48, HCO3 36, PaO2 is 110 on 4 lit NC. To correct the ABG, you should?
   A) Add acetazolamide diuretic
   B) Increase doses of diuretics
   C) Stop diuretics
   D) Place on NIPPV