

**N441 Week 5: ABG Practice Problems**

1. A patient in the CCU has an arterial blood gas showing a pH of 7.2, PaCO<sub>2</sub> of 49, and HCO<sub>3</sub> of 24. Which acid-base imbalance is this patient experiencing?

A	N	B
pH	CO <sub>3</sub>	
	CO <sub>2</sub>	

uncompensated  
respiratory  
acidosis

2. You are caring for a patient with an arterial blood gas showing a pH of 7.47, PaCO<sub>2</sub> of 36, and HCO<sub>3</sub> of 27. Which acid-base imbalance is this patient experiencing?

A	N	B
	CO <sub>2</sub>	pH
		CO <sub>3</sub>

uncompensated  
metabolic  
alkalosis

3. A patient in the ED has an arterial blood gas showing a pH of 7.40, PaCO<sub>2</sub> of 37, and HCO<sub>3</sub> of 24. Which acid-base imbalance is this patient experiencing?

A	N	B
	CO <sub>2</sub>	pH
		CO <sub>3</sub>

Normal

4. A patient in the ED has an arterial blood gas showing a pH of 7.22, PaCO<sub>2</sub> of 37, and HCO<sub>3</sub> of 21. Which acid-base imbalance is this patient experiencing?

A	N	B
pH	CO <sub>2</sub>	
	CO <sub>3</sub>	

uncompensated  
metabolic  
acidosis

5. A patient in the CCU has an arterial blood gas showing a pH of 7.5, PaCO<sub>2</sub> of 33, and HCO<sub>3</sub> of 25. Which acid-base imbalance is this patient experiencing?

A	N	B
	CO <sub>3</sub>	pH
		CO <sub>2</sub>

uncompensated  
respiratory  
alkalosis