REACTION STOICHIOMETRY ASSIGNEMNT (#1)

INSTRUCTIONS: USE FACTOR LABEL METHOD TO SOLVE THE FOLLOWING REACTIONS, BE CAREFULL WITH UNITS AND CANCELLATION PATTERNS. REMEMBER TO INDENTIFY YOUR KNOWN AND OBJECTIVE BEFORE YOU BEGIN. ALL QUESTIONS REFER TO THE FOLLOWING REACTION.

USE FORUM FOR HELP IF YOU NEED IT.

3 H2(g) + N2 (g) 🡪 2 NH3(g)

1. If 51.0 grams of ammonia (NH3 ) is produced how many moles of hydrogen (H2) must have reacted?
2. If 26 grams of nitrogen (N2) reacts, how much hydrogen must react?
3. If 36.0 grams of ammonia are produced, how many grams of hydrogen reacted?
4. If 6.0 grams of hydrogen reacts, how many grams of ammonia are produced?
5. If 22.4 L of nitrogen gas reacts, how many grams of ammonia are produced? HINT: 1 mole of any gas = 22.4 L