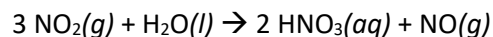


15. How many molecules of oxygen are produced by the decomposition of 6.54 g of potassium chlorate (KClO_3)?

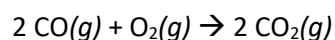


16. The last step in the production of nitric acid is the reaction of nitrogen dioxide with water.



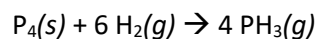
How many grams of nitrogen dioxide must react with water to produce 5.00×10^{22} molecules of nitrogen monoxide?

17. The equation for the combustion of carbon monoxide is:



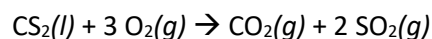
How many liters of oxygen are required to burn 3.86 L of carbon monoxide?

18. Phosphorus and hydrogen can be combined to form phosphine (PH_3).

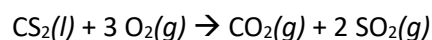


How many liters of phosphine are formed when 0.42 L of hydrogen reacts with phosphorus?

19. Calculate the volume of sulfur dioxide, in milliliters, produced when 27.9 mL O_2 reacts with carbon disulfide.



20. How many deciliters of carbon dioxide are produced when 0.38 L SO_2 is formed?



23. The combustion of acetylene gas is represented by this equation:



- How many grams of CO_2 and grams of H_2O are produced when 52.0 g C_2H_2 burn in oxygen?
- How many moles of H_2O are produced when 64.0 g C_2H_2 burn in oxygen?