When heated, mercury(II) oxide decomposes into its elements. What mass of mercury can be isolated from 58.45 g of mercury(II) oxide?

What mass of oxygen is required to react with 125.0 g of pentane, C_5H_{12} ?

25.00 g of calcium chloride reacts with silver nitrate. What is the mass of the precipitate that is produced?

What mass of iron can be obtained from the reaction of iron(III) chloride and 19.0 g of magnesium?

7.96 g of a compound MBr_2 is reacted with potassium carbonate and 6.99 g of potassium bromide are isolated. What is the identity of the metal "M"?

When a certain hydrocarbon is burned, 45.64 g of carbon dioxide and 21.36 g of water are produced. What is the hydrocarbon?