2KClO3 🡪 2KCl + 3O2

Use the above equation for the next 3 problems

1) How many moles of O2 are produced if you start with 1.86 moles of KClO3?

2) How many grams of KCl are produced if you also produced 0.96 moles of O2?

3) How many moles of KClO3 are needed to produce 15.7 g of O2?

4Fe + 3O2 🡪 2Fe2O3

4) How many moles of Fe are needed to yield 4.6 g of Fe2O3?

5) How many grams of O2 are needed to react with 3.74 moles of Fe?

6) How many grams of Fe2O3 are produced from 23.8 grams of O2?

Answers

1. 2.79 mol O2
2. 47.7 g KCl
3. 0.33 mol KClO3
4. 0.058 mol Fe
5. 89.8 g O2
6. 79.2 g Fe2O3