

Balancing Worksheet #1

Please note that several of these equations are already balanced as written. The answers are in this file and are several lines below the last problem. There are 50 problems in two columns.

1. $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
2. $\text{S}_8 + \text{O}_2 \rightarrow \text{SO}_3$
3. $\text{HgO} \rightarrow \text{Hg} + \text{O}_2$
4. $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$
5. $\text{Na} + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
6. $\text{C}_{10}\text{H}_{16} + \text{Cl}_2 \rightarrow \text{C} + \text{HCl}$
7. $\text{Si}_2\text{H}_3 + \text{O}_2 \rightarrow \text{SiO}_2 + \text{H}_2\text{O}$
8. $\text{Fe} + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3$
9. $\text{C}_7\text{H}_6\text{O}_2 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
10. $\text{FeS}_2 + \text{O}_2 \rightarrow \text{Fe}_2\text{O}_3 + \text{SO}_2$
11. $\text{Fe}_2\text{O}_3 + \text{H}_2 \rightarrow \text{Fe} + \text{H}_2\text{O}$
12. $\text{K} + \text{Br}_2 \rightarrow \text{KBr}$
13. $\text{C}_2\text{H}_2 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
14. $\text{H}_2\text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$
15. $\text{C}_7\text{H}_{16} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
16. $\text{SiO}_2 + \text{HF} \rightarrow \text{SiF}_4 + \text{H}_2\text{O}$
17. $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$
18. $\text{KClO}_3 \rightarrow \text{KClO}_4 + \text{KCl}$
19. $\text{P}_4\text{O}_{10} + \text{H}_2\text{O} \rightarrow \text{H}_3\text{PO}_4$
20. $\text{Sb} + \text{O}_2 \rightarrow \text{Sb}_4\text{O}_6$
21. $\text{C}_3\text{H}_8 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
22. $\text{Fe}_2\text{O}_3 + \text{CO} \rightarrow \text{Fe} + \text{CO}_2$
23. $\text{PCl}_5 + \text{H}_2\text{O} \rightarrow \text{HCl} + \text{H}_3\text{PO}_4$
24. $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow \text{S}_8 + \text{HCl}$
25. $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + \text{H}_2$
26. $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$
27. $\text{N}_2 + \text{O}_2 \rightarrow \text{N}_2\text{O}$
28. $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
29. $\text{SiCl}_4 + \text{H}_2\text{O} \rightarrow \text{H}_4\text{SiO}_4 + \text{HCl}$
30. $\text{H}_3\text{PO}_4 \rightarrow \text{H}_4\text{P}_2\text{O}_7 + \text{H}_2\text{O}$
31. $\text{CO}_2 + \text{NH}_3 \rightarrow \text{OC}(\text{NH}_2)_2 + \text{H}_2\text{O}$
32. $\text{Al}(\text{OH})_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2\text{O}$
33. $\text{Fe}_2(\text{SO}_4)_3 + \text{KOH} \rightarrow \text{K}_2\text{SO}_4 + \text{Fe}(\text{OH})_3$
34. $\text{H}_2\text{SO}_4 + \text{HI} \rightarrow \text{H}_2\text{S} + \text{I}_2 + \text{H}_2\text{O}$
35. $\text{Al} + \text{FeO} \rightarrow \text{Al}_2\text{O}_3 + \text{Fe}$
36. $\text{Na}_2\text{CO}_3 + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$
37. $\text{P}_4 + \text{O}_2 \rightarrow \text{P}_2\text{O}_5$
38. $\text{K}_2\text{O} + \text{H}_2\text{O} \rightarrow \text{KOH}$
39. $\text{Al} + \text{O}_2 \rightarrow \text{Al}_2\text{O}_3$
40. $\text{Na}_2\text{O}_2 + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{O}_2$
41. $\text{C} + \text{H}_2\text{O} \rightarrow \text{CO} + \text{H}_2$
42. $\text{H}_3\text{AsO}_4 \rightarrow \text{As}_2\text{O}_5 + \text{H}_2\text{O}$
43. $\text{Al}_2(\text{SO}_4)_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Al}(\text{OH})_3 + \text{CaSO}_4$
44. $\text{FeCl}_3 + \text{NH}_4\text{OH} \rightarrow \text{Fe}(\text{OH})_3 + \text{NH}_4\text{Cl}$
45. $\text{Ca}_3(\text{PO}_4)_2 + 6 \text{SiO}_2 \rightarrow \text{P}_4\text{O}_{10} + \text{CaSiO}_3$
46. $\text{N}_2\text{O}_5 + \text{H}_2\text{O} \rightarrow \text{HNO}_3$
47. $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2$
48. $\text{H}_3\text{BO}_3 \rightarrow \text{H}_4\text{B}_6\text{O}_{11} + \text{H}_2\text{O}$
49. $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
50. $\text{NaOH} + \text{Cl}_2 \rightarrow \text{NaCl} + \text{NaClO} + \text{H}_2\text{O}$