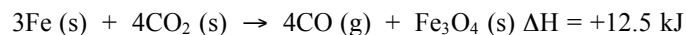
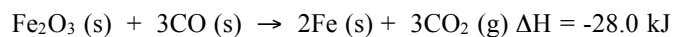


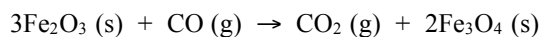
AP Chem Ch. 5 Study Sheet 3**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

1. Given the following reactions

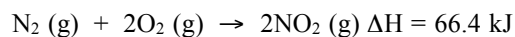


the enthalpy of the reaction of Fe_2O_3 with CO

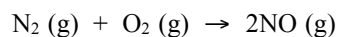


is _____ kJ.

- a. -59.0
 - b. 40.5
 - c. -15.5
 - d. -109
 - e. +109
2. Given the following reactions

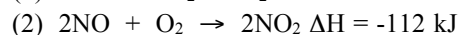


the enthalpy of the reaction of the nitrogen to produce nitric oxide

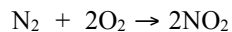


is _____ kJ.

- a. 180.6
 - b. -47.8
 - c. 47.8
 - d. 90.3
 - e. -180.6
3. Given the following reactions



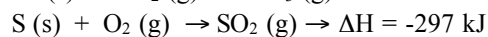
the enthalpy of the reaction of nitrogen with oxygen to produce nitrogen dioxide



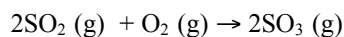
is _____ kJ.

- a. 68
- b. -68
- c. -292
- d. 292
- e. -146

4. Given the following reactions:

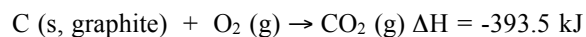
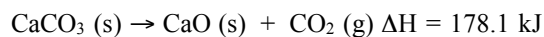


the enthalpy of the reaction in which sulfur dioxide is oxidized to sulfur trioxide

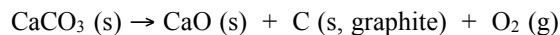


is _____ kJ.

- a. 196
 - b. -196
 - c. 1087
 - d. -1384
 - e. -543
5. Given the following reactions

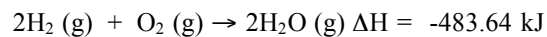
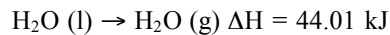


the enthalpy of the reaction

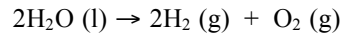


is _____ kJ.

- a. 215.4
 - b. 571.6
 - c. -215.4
 - d. -571.6
 - e. 7.01×10^4
6. Given the following reactions



the enthalpy for the decomposition of liquid water into gaseous hydrogen and oxygen



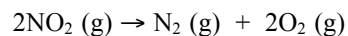
is _____ kJ.

- a. -395.62
- b. -527.65
- c. 439.63
- d. 571.66
- e. 527.65

7. Given the following reactions



the enthalpy for the decomposition of nitrogen dioxide into molecular nitrogen and oxygen



is _____ kJ.

- a. 67.6
- b. -67.6
- c. 293.8
- d. -293.8
- e. 45.5

8. Given the following reactions



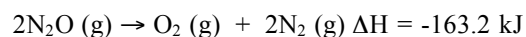
the enthalpy of reaction for



is _____ kJ.

- a. 67.6
- b. 45.5
- c. -293.8
- d. -45.5
- e. 293.8

9. Given the following reactions



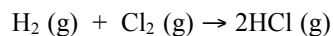
the enthalpy of reaction for



is _____ kJ.

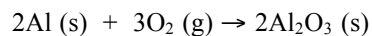
- a. 145.7
- b. 343.9
- c. -343.9
- d. 17.5
- e. -145.7

10. The value of ΔH° for the reaction below is -186 kJ.



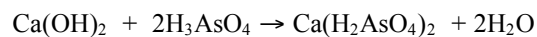
The value of ΔH_f° for $\text{HCl}(\text{g})$ is _____ kJ/mol.

- a. -3.72×10^2
 - b. -1.27×10^2
 - c. -93.0
 - d. -186
 - e. +186
11. The value of ΔH° for the following reaction is -3351 kJ:



The value of ΔH_f° for $\text{Al}_2\text{O}_3(\text{s})$ is _____ kJ.

- a. -3351
 - b. -1676
 - c. -32.86
 - d. -16.43
 - e. +3351
12. Given the data in the table below, $\Delta H^\circ_{\text{rxn}}$ for the reaction



is _____ kJ.

Substance	ΔH_f° (kJ/mol)
$\text{Ca}(\text{OH})_2$	-986.6
H_3AsO_4	-900.4
$\text{Ca}(\text{H}_2\text{AsO}_4)_2$	-2346.0
H_2O	-285.9

- a. -744.9
- b. -4519
- c. -4219
- d. -130.4
- e. -76.4