Warm-up 15.1

1. Which reaction has an enthalpy change equal to a standard enthalpy change of formation, ΔH_f^{Θ} ? All reactions occur at 298 K and 1.01×10^5 Pa.

A.
$$C_4H_8(g) + H_2O(g) \rightarrow C_4H_9OH(l)$$

B.
$$4CO_2(g) + 5H_2O(g) \rightarrow C_4H_9OH(l) + \frac{13}{2}O_2(g)$$

$$C. \qquad 4C(s) + 5H_2(g) + \tfrac{1}{2} \ O_2(g) \longrightarrow C_4H_9OH(l)$$

D.
$$8C(s) + 10H_2(g) + O_2(g) \rightarrow 2C_4H_9OH(l)$$

Please work through number 1 and 7 from yesterday's study worksheet (15.1).