

Test 1 Preparation Problems Key

1. 260. kJ
2. 24.3 kJ/mol
3. 0.0820 M
4. 0.0303 atm
5. 101.28 °C
6. 87.2 g/mol
7. I.

$$\text{rate of reaction} = -\frac{1}{8} \frac{\Delta[\text{H}_2\text{S}]}{\Delta t} = -\frac{1}{4} \frac{\Delta[\text{O}_2]}{\Delta t} = \frac{1}{8} \frac{\Delta[\text{H}_2\text{O}]}{\Delta t} = \frac{\Delta[\text{S}_8]}{\Delta t}$$

- II. 0.010 M/s
8. I. rate = $k[\text{CO}]$
II. First order
III. 0.0123 1/s