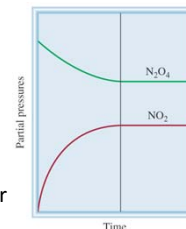


Reaction quotient versus time

General Chemistry, CH102 Spring 2011

1. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the chemical reaction.

- 0% 1. It is **spontaneous**
- 0% 2. It is **at equilibrium**
- 0% 3. It is **non-spontaneous**
- 0% 4. Its spontaneity is **not known** without further information



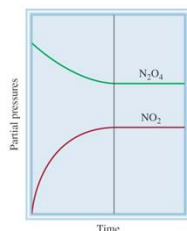
0 of 5

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Countdown
Timer
On Slide

2. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the ratio Q/K .

- 0% 1. It is **greater** than 1
- 0% 2. It is **equal** to 1
- 0% 3. It is **less** than 1
- 0% 4. The ratio is not known without further information



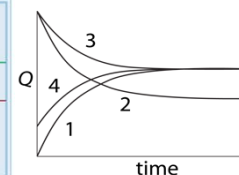
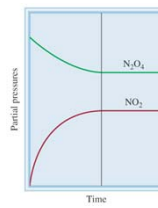
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Countdown
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3. For the reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ and **certain initial conditions**, the figure on the left shows how the partial pressures of the N_2O_4 and NO_2 change with time. Which curve on the right shows the corresponding **change of Q with time**?

- 0% 1. 1
- 0% 2. 2
- 0% 3. 3
- 0% 4. 4
- 0% 5. None



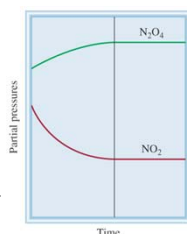
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Countdown
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4. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the chemical reaction.

- 0% 1. It is **spontaneous**
- 0% 2. It is **at equilibrium**
- 0% 3. It is **non-spontaneous**
- 0% 4. Its spontaneity is **not known** without further information



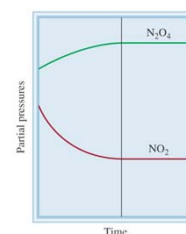
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Countdown
Timer
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5. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the ratio Q/K .

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- 0% 2. It is **equal** to 1
- 0% 3. It is **less** than 1
- 0% 4. The ratio is not known without further information



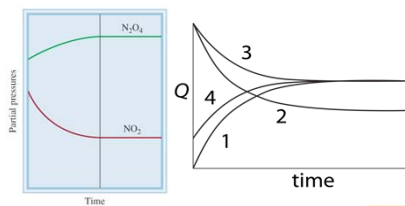
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Countdown
Timer
On Slide

6. For the reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ and **certain initial conditions**, the figure on the left shows how the partial pressures of the N_2O_4 and NO_2 change with time. Which curve on the right shows the corresponding **change of Q with time**?

- 0% 1. 1
- 0% 2. 2
- 0% 3. 3
- 0% 4. 4
- 0% 5. None

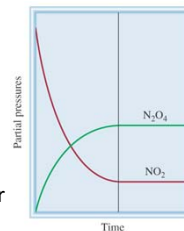


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7. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the chemical reaction.

- 0% 1. It is **spontaneous**
- 0% 2. It is **at equilibrium**
- 0% 3. It is **non-spontaneous**
- 0% 4. Its spontaneity is **not known** without further information

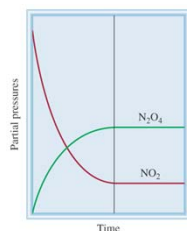


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8. The figure shows how the partial pressures of the N_2O_4 and NO_2 **change with time** due to the chemical reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ for **certain initial conditions**. At these initial conditions, the following is known about the ratio **Q/K**.

- 0% 1. It is **greater** than 1
- 0% 2. It is **equal** to 1
- 0% 3. It is **less** than 1
- 0% 4. The ratio is not known without further information

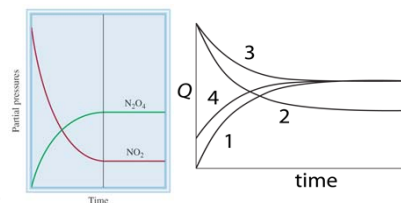


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9. For the reaction $\text{N}_2\text{O}_4 \rightarrow 2 \text{NO}_2$ and certain initial conditions, the figure on the left shows how the partial pressures of the N_2O_4 and NO_2 change with time. Which curve on the right shows the corresponding change of Q with time?

- 0% 1. 1
- 0% 2. 2
- 0% 3. 3
- 0% 4. 4
- 0% 5. None



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0 of 5