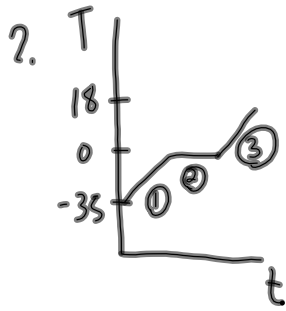


Changes in State + Temp.



- ① 21840J
- ② 99900J
- ③ 22572J

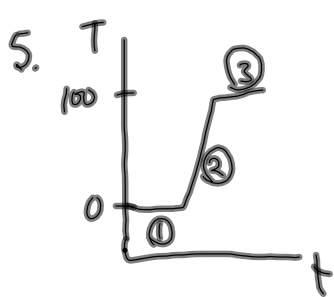
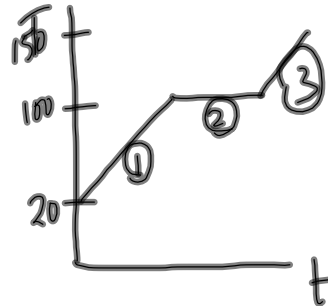
- 144312J
- $1.44 \times 10^5 J$

- 3. ① -10285000000J
- ② -5650000000J
- ③ -7315000000J

- $-7.41 \times 10^9 J$

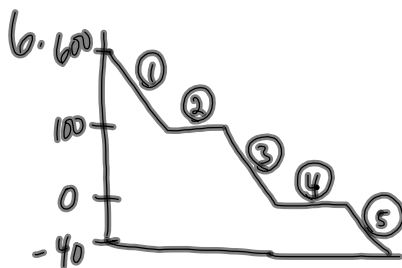
- 4. ① 25080J
- ② 169500J
- ③ 7012.5J

- 201592.5J



- ① 6660J
- ② 8360J
- ③ 45200J

- 60220J



- ① 561000J
- ② 1356000J
- ③ 250800J
- ④ 199800J
- ⑤ 49920J

2417520J $2.418 \times 10^6 J$