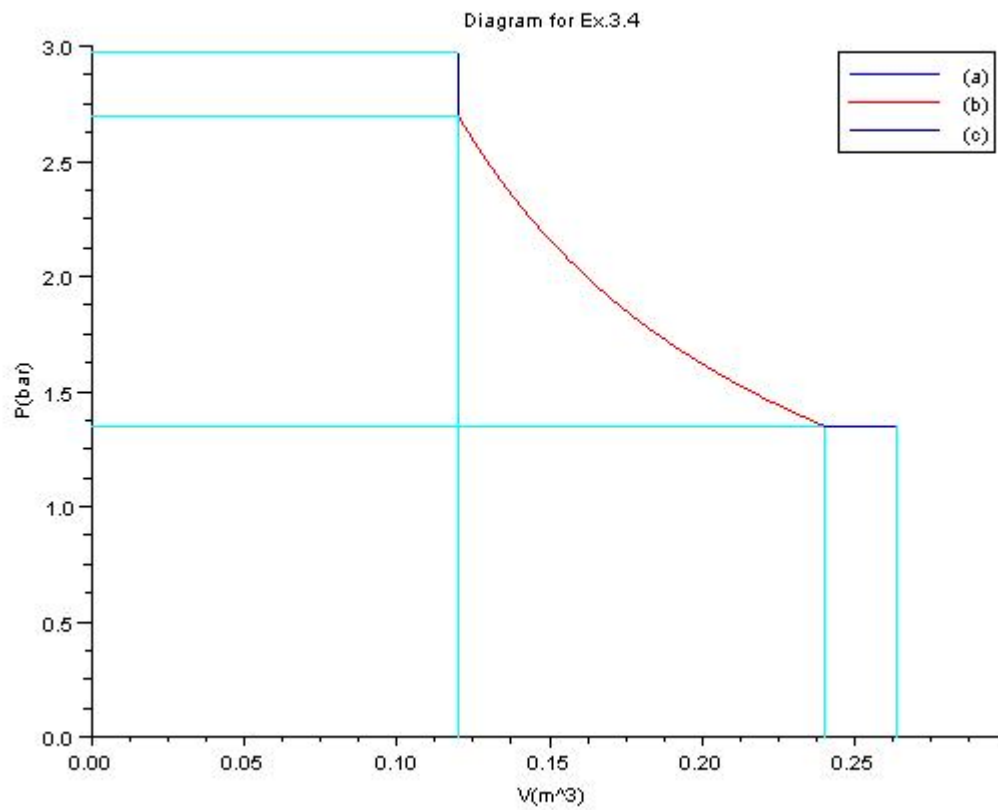


## Example 3.4

### Result



**Figure 3.4 PV Diagram Nitrogen**

(a) Immersed In ice/water bath

work done

3207.

J

Heat Transferred Q =

- 11229.

J

change in Internal Energy

- 562.

J

change in enthalpy

- 786.

J

(b) Isothermal Compression

work done by Isothermal Compression

22487.

J

Heat Transferred Q =

- 22487.

J

change in Internal Energy

0.

J

change in enthalpy

0.

J

(c) Constant Vol Process

work done by Const Vol Process

0.

J

Heat Transferred  $Q =$

8014.

J

change in Internal Energy

561.

J

change in enthalpy

55.

J