

## Chapter 4 Question #15

Typically for solids:

- 1)  $C_v > C_p$
- 2)  $C_v \approx C_p$
- 3)  $C_v < C_p$
- 4) It depends on the material, these are empirically determined quantities

## Chapter 4 Question 15 Answer:

### (2) $C_v$ approximately equal to $C_p$

Solids and liquids are nearly incompressible. So they expand little when their internal energy is increased. Thus they do little work, and adding a unit of energy to them at constant pressure (where work can be done) raises their temperature the same amount as if that unit of energy was added at constant volume (where no work can be done).

Class Response:

Question 3 : Question 3

