

14 An ideal monatomic gas has 1000 J of heat added to it and it does 500 J of work; its thermodynamic temperature changes by ΔT_1 . When twice the amount of heat is added to it and it does the same amount of work, its temperature changes by ΔT_2 . The ratio of $\Delta T_1 / \Delta T_2$ is

A 1/5

B 1/3

C 3/5

D 1