

15 A sample of gas is compressed slowly in a metal cylinder.  $W$  is the amount of work done on the gas. During the compression, the internal energy of the gas increases by  $\Delta U$ .

How much heat is transferred from the gas to the surroundings?

A  $W + \Delta U$

B  $W - \Delta U$

C  $-W + \Delta U$

D  $-W - \Delta U$

16 A mass attached to a spring oscillates on a horizontal surface.