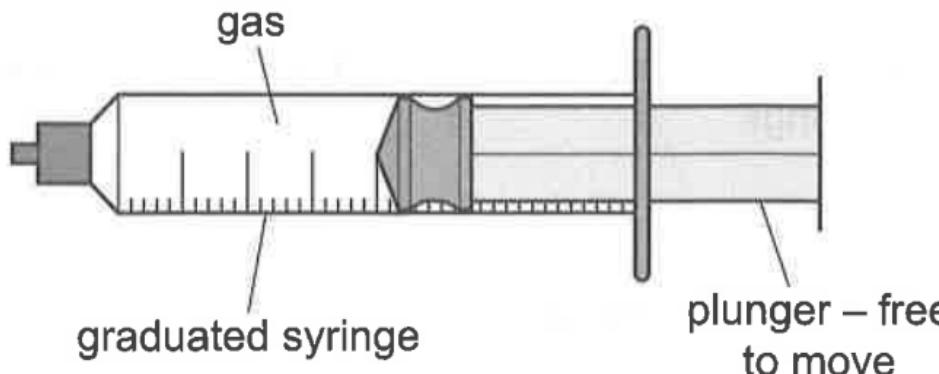


15 The diagram shows a fixed amount of gas enclosed in a graduated syringe.



The syringe is heated and 50 J of energy is transferred to the gas.

The gas expands and does 30 J of work pushing the plunger outwards.

What is the magnitude of the change in the internal energy of the gas?

- A 20 J
- B 30 J
- C 50 J
- D 80 J

16 A particle oscillates with undamped simple harmonic motion.