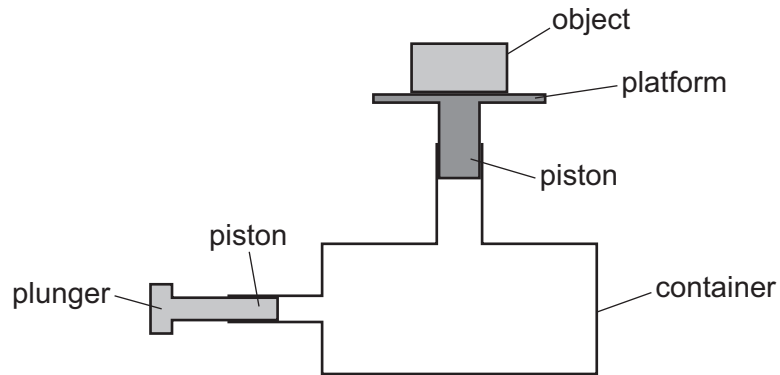


- 16** An object of weight  $12\text{ N}$  rests on a platform on top of a container with two pistons, as shown. The container contains a fixed mass of gas, and the pistons are free to move.



The plunger is slowly pushed  $4.0\text{ cm}$  to the right. As a result, the object slowly moves upwards a distance  $0.50\text{ cm}$ .

How much work is done on the object?

- A**  $0.060\text{ J}$       **B**  $0.48\text{ J}$       **C**  $6.0\text{ J}$       **D**  $48\text{ J}$