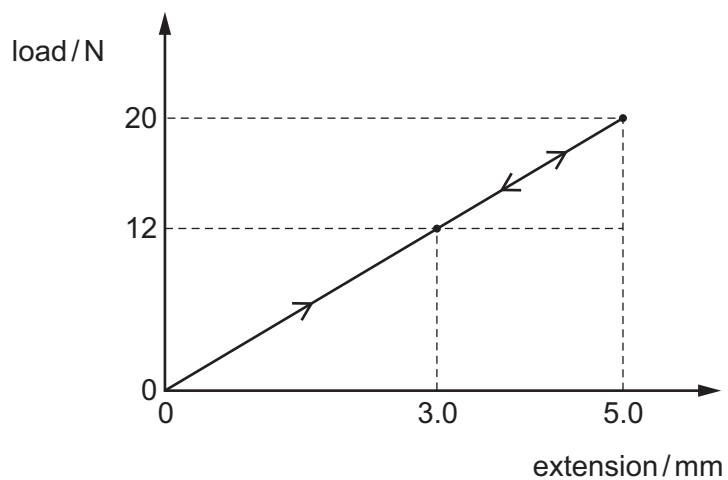


- 21** A metal wire is attached at one end to a fixed point and a load is hung from the other end so that the wire hangs vertically. The load is increased from zero to 20 N. This causes the wire to extend elastically by 5.0 mm. The load is then reduced to 12 N and the extension decreases to 3.0 mm.



How much strain energy is released during the unloading process?

- A**  $0.8 \times 10^{-2} \text{ J}$     **B**  $1.8 \times 10^{-2} \text{ J}$     **C**  $2.4 \times 10^{-2} \text{ J}$     **D**  $3.2 \times 10^{-2} \text{ J}$