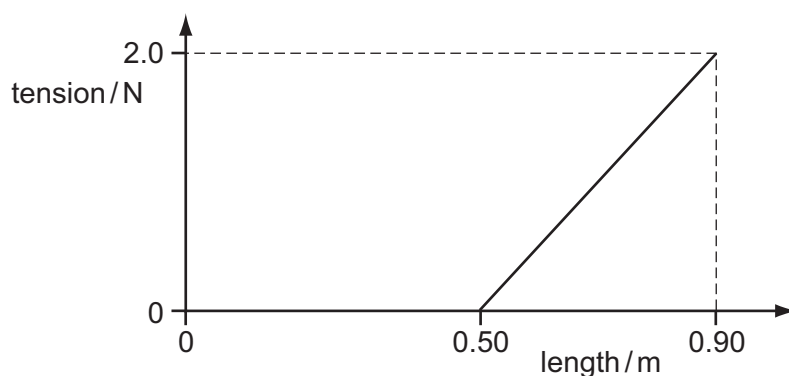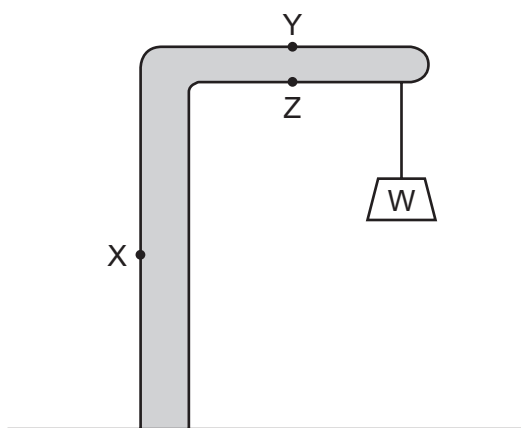**19** A spring of unextended length 0.50 m is stretched by a force of 2.0 N to a new length of 0.90 m. The variation of its length with tension is as shown.

How much strain energy is stored in the spring?

A   0.40 J   **B**   0.80 J   **C**   0.90 J   **D**   1.8 J

20 A simple crane consists of a rigid vertical pillar supporting a horizontal beam.

A weight W is lifted by a rope at the end of the beam.

What are the forces at points X, Y and Z due to the weight W?

	force at X	force at Y	force at Z
A	tension	compression	tension
B	tension	tension	compression
C	compression	tension	compression
D	compression	compression	compression