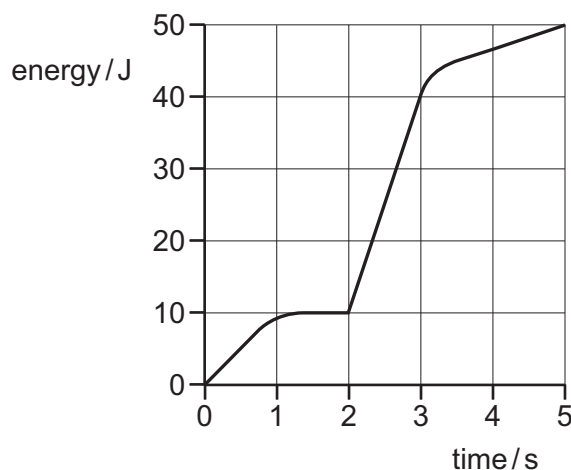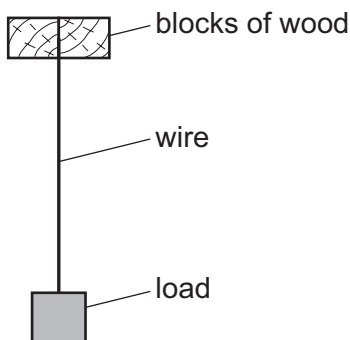**17** An electrical generator is started at time zero. The total electrical energy generated during the first 5 seconds is shown in the graph.

What is the maximum electrical power generated at any instant during these first 5 seconds?

A 10 W   **B** 13 W   **C** 30 W   **D** 50 W

18 The diagram shows a wire of diameter D and length L that is firmly clamped at one end between two blocks of wood. A load is applied to the wire which extends its length by x.

A second wire is made of the same material, but of diameter $2D$ and length $3L$. Both wires obey Hooke's law.

What is the extension of the second wire when the same load is applied?

A $\dfrac{2}{3}x$ **B** $\dfrac{3}{4}x$ **C** $\dfrac{4}{3}x$ **D** $\dfrac{3}{2}x$