19 The data below are taken from a test of a petrol engine for a motor car.

power output	150 kW
fuel consumption	20 litres per hour
energy content of fuel	40 MJ per litre

Which expression will evaluate the efficiency of the engine?

A $\dfrac{150 \times 10^3}{40 \times 10^6 \times 20 \times 60 \times 60}$

B $\dfrac{150 \times 10^3 \times 60 \times 60}{20 \times 40 \times 10^6}$

C $\dfrac{150 \times 10^3 \times 40 \times 10^6 \times 20}{60 \times 60}$

D $\dfrac{150 \times 10^3 \times 20}{40 \times 10^3 \times 60 \times 60}$

20 What is represented by the gradient of a graph of force (vertical axis) against extension (horizontal axis)?

A elastic limit

B spring constant

C stress

D Young modulus

Space for working