

21 To determine the Young modulus of a wire, several measurements are taken.

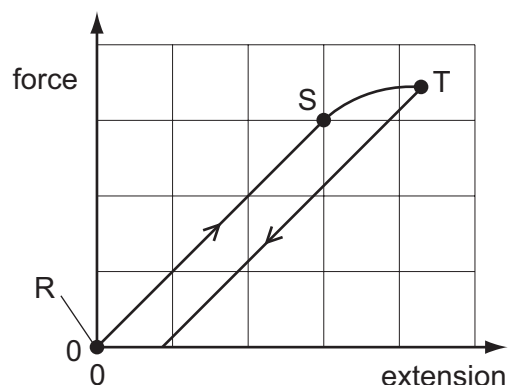
In which row can the measurement **not** be taken **directly** with the stated apparatus?

	measurement	apparatus
A	area of cross-section of wire	micrometer screw gauge
B	extension of wire	vernier scale
C	mass of load applied to wire	electronic balance
D	original length of wire	metre rule

22 A long, thin metal wire is suspended from a fixed support and hangs vertically. Masses are suspended from its lower end.

The load on the lower end is increased from zero and then decreased again back to zero.

The diagram shows the force-extension graph produced.



Where on the graph would the elastic limit be found?

- A** anywhere between point R and point S
- B** just beyond point S
- C** exactly at point S
- D** exactly at point T