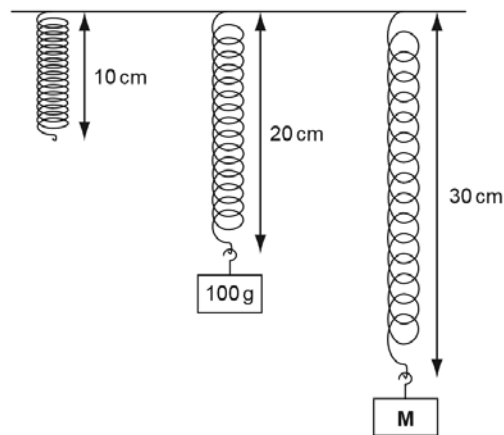


13.

Objects with different masses are hung on a 10 cm spring. The diagram shows how much the spring stretches.



The extension of the spring is directly proportional to the mass hung on it.

What is the mass of object M?

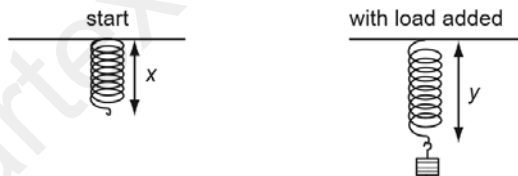
- A 110g B 150g C 200g D 300g

Ans:

C

14.

A student carries out an experiment to plot an extension / load graph for a spring. The diagrams show the apparatus at the start of the experiment and with a load added.



What is the extension caused by the load?

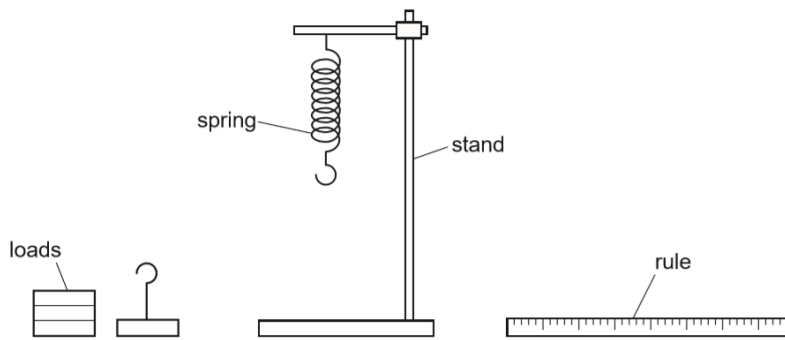
- A x B y C $y + x$ D $y - x$

Ans:

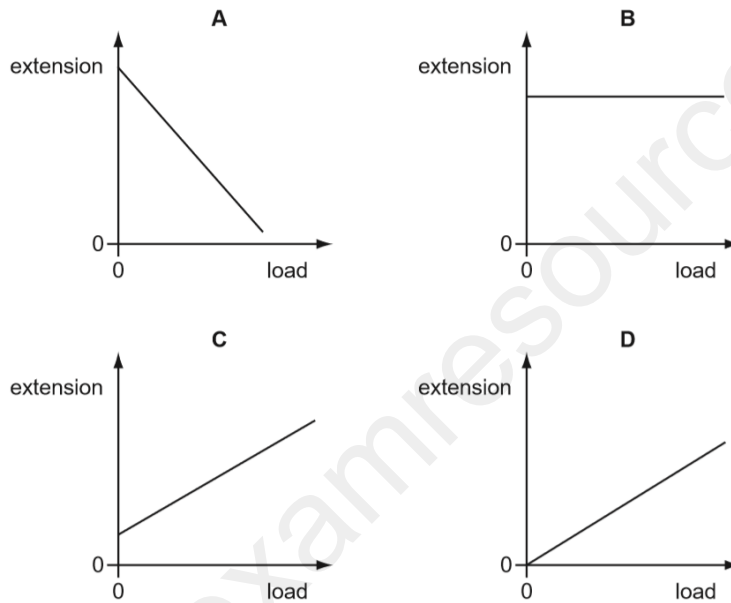
D

15.

A spring is suspended from a stand. Loads are added and the extensions are measured.



Which graph shows the result of plotting extension against load?

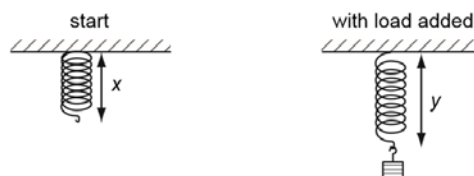


Ans:

D

16.

A student carries out an experiment to plot the extension-load graph for a spring. The diagrams show the apparatus at the start of the experiment and with a load added.



What is the extension caused by the load?

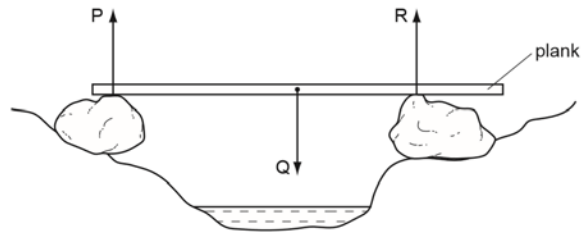
- A x B y C $y+x$ D $y-x$

Ans:

D

17.

A wooden plank rests in equilibrium on two boulders on opposite sides of a narrow stream. Three forces of size P, Q and R act on the plank.



How are the sizes of the forces related?

- A $P + Q = R$
- B $P + R = Q$
- C $P = Q = R$
- D $P = Q + R$

Ans

B