20 A mass of 60.0 g is suspended from a spring and the distance from the bottom of the spring to the floor is measured to be 16.4 cm.

The mass is replaced with a 100.0 g mass and the distance from the bottom of the spring to the floor is now measured to be 12.6 cm. The spring obeys Hooke's law.

What is the spring constant of the spring?

A $1.05\,\text{N}\,\text{m}^{-1}$ **B** $1.35\,\text{N}\,\text{m}^{-1}$ **C** $10.3\,\text{N}\,\text{m}^{-1}$ **D** $103\,\text{N}\,\text{m}^{-1}$