

The natural length of a spring is 10 cm. A force of 25 N stretches it to a length of 20 cm. How much *work*, in units of N-cm, is done in stretching it from a length of 10 cm to 15 cm? Hooke's law for a spring is given by $f = kx$, where f is the force, x is the distance the string is stretched, and k is a constant.

- a. 12.5
- b. 15.6
- c. 25
- d. 31.3