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Question 9

$F_s = \frac{1}{2} k x^2$

$d_f = 2.20m$

$d_i = 1.93m$

$x_i = .011m$

$x_f = ?$

$\frac{1}{2} k (.011)^2 \propto 1.93$

$k \propto \frac{2 \cdot 1.93}{(.011)^2}$

$\frac{1}{2} \left(\frac{2 \cdot 1.93}{(.011)^2} \right) (x_f)^2 \propto 2.2$

$x_f \propto \sqrt{\frac{2 \cdot 2.2}{\left(\frac{2 \cdot 1.93}{(.011)^2} \right)}}$

$x_f = 0.012m$

No