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- Diagram illustrating two springs in series under tension T . The left spring has a large spring constant k_1 and the right spring has a small spring constant k_2 . The displacement of the left spring is labeled 1 and the displacement of the right spring is labeled 2.

In the figure is shown the force needed to stretch an uncoiled DNA molecule.



Suppose we measure the spring constant of DNA at three points.
(A) When it was only 5% longer than its unstretched length;
(B) When it was 75% longer than its unstretched length;
(C) When it was 150% longer than its unstretched length. Which measurement would yield the largest spring constant?

1. A
2. B
3. C
4. They would all be the same.

