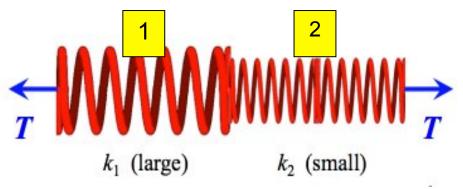
Two springs, are linked together and pulled from opposite ends by equal tension forces T. The spring constants are NOT the same: $k_1 >> k_2$. The system is at rest. How do the forces that the springs exert on each other?



- 1. They are equal but not equal to *T*.
- 2. They are equal and equal to *T*.
- 3. Spring 1 exerts a larger force on spring 2, than 2 does on 1.
- 4. Spring 2 exerts a larger force on spring 1, than 1 does on 2.
- 5. Something else.



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. The would all be the same.

