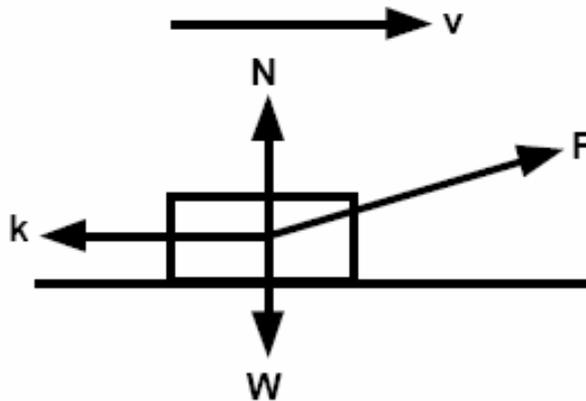


A person pulls a block across a rough horizontal surface at a **constant speed** by applying a force  $F$ . The arrows correctly indicate the directions, but not necessarily the magnitudes of the forces on the block.

Which of the following relations among the force magnitudes of  $W$ ,  $k$ ,  $N$ , and  $F$  **must be true**?



1.  $F = k$  and  $N = W$
2.  $F > k$  and  $N < W$
3.  $F = k$  and  $N > W$
4.  $F > k$  and  $N = W$
5. None of the above choices