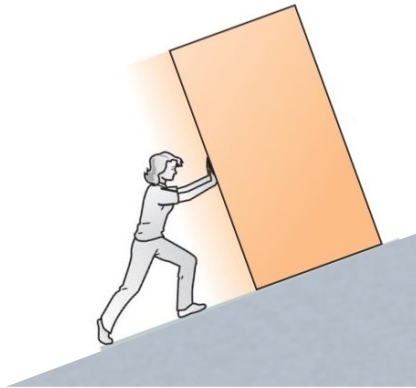


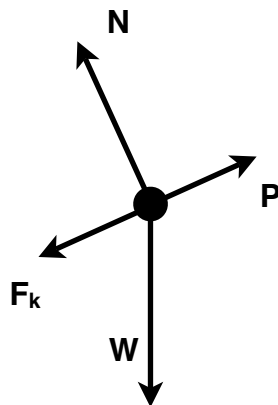
Kinetic friction

You are pushing a box uphill. Which direction does the friction point?

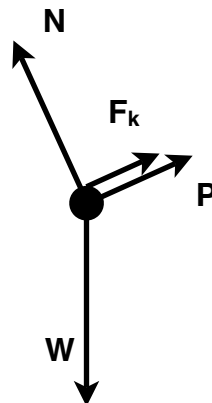
Draw a free-body diagram. What if the box slid *down* the hill, even though you were still pushing it?



Solution: Free-body diagram while pushing the box up the hill:



Free-body diagram while box slides down (still pushing up):



so the kinetic friction is pointing the other way.