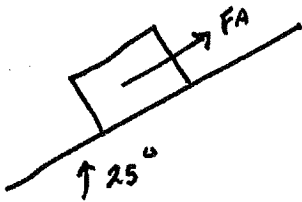
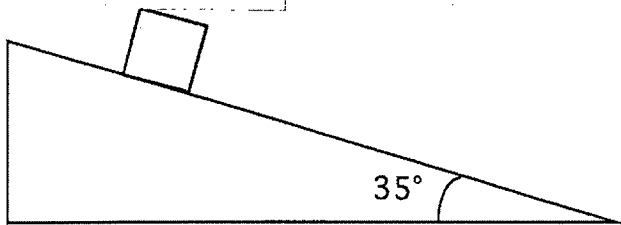


## Inclines and Angles with Friction

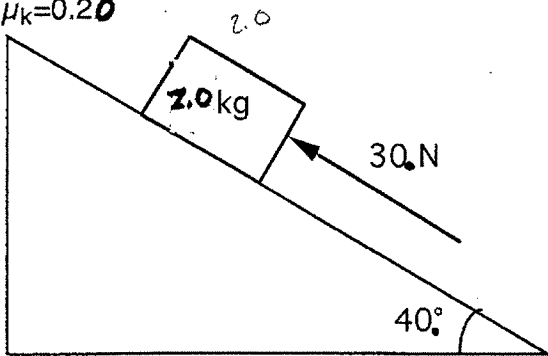
1. Find the acceleration and normal force for a 50. N block of ice which is pushed with a 25 N force at a 25 degree angle to the horizontal if  $\mu_s=0.2$  and  $\mu_k=0.10$



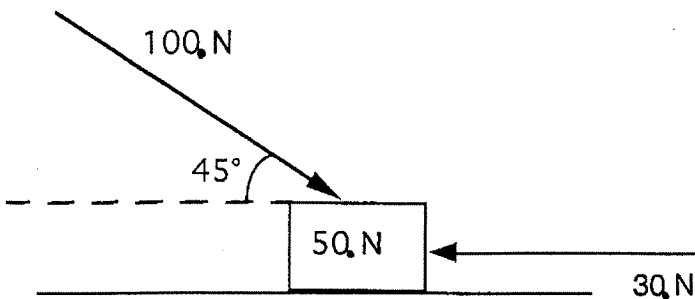
2. Label all the forces acting on the 20 kg crate and find its acceleration down the ramp if  $\mu_s=0.4$  and  $\mu_k=0.20$



3. Find the acceleration of the following object up the incline and the normal force if  $\mu_s=0.3$  and  $\mu_k=0.20$



4. Find the acceleration of the following object if  $\mu_s=0.2$  and  $\mu_k=0.10$



5. Find the acceleration of a 1000,kg car that is sliding down an icy driveway that makes a  $25^\circ$  angle, if the  $\mu_k=0.10$

6. Find the acceleration of the 5<sup>0</sup>kg box if  $\mu_s=0.2$  and  $\mu_k=0.10$  and the 60, N force is horizontally applied.

