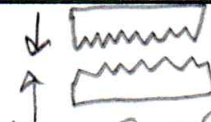


1. What factors affect friction?

- a. F_{Normal} \longrightarrow 
 Force Pushing two Surfaces together
- b. $\rightarrow \mu$, surface friction

2. When a car is driving down the road and its tires are firmly attached to the road this is an example of Static friction.

3. If that car has to stop rapidly, and starts to skid this is an example of Sliding Kinetic friction.

4. Sliding friction is always \leq than static friction.

5. The force of friction equals = F_N * μ

6. A substance that has a greater friction will have a higher μ . (This is a numerical value that represents the level of friction) Coefficient of friction

7. A person having a mass of 100kg is standing on a flat piece of concrete answer the following questions

$$m \cdot g = F_w$$

$$100 \cdot 10 = 1000N$$

a. What is this person's attraction to earth in Newtons _____ ?

b. What is normal force exerted by the ground? 1000 N

c. If the coefficient of friction is .9, determine the force of friction.

$$1000 \cdot .9 = 900 N$$

d. If the pavement is raised to a level of 10 degrees, answer these questions

i. What will be the force exerted by gravity?

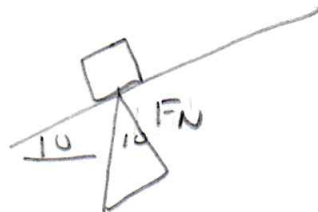
$$1000 N$$

ii. What is the normal force?

$$984 N$$

iii. What is the force of friction?

$$984 \cdot .9 = 886 N$$



$$\cos 10 \cdot 1000 N =$$

$$F_N = 984 N$$