**Noteguide for Solving Friction Problems Videos 4G (keep) Name**

Write down the general strategy:



**Sample Problem: A 5.00 kg block rests on a level table where there is a static coefficient of friction of 0.470, and a dynamic of 0.170.**

a) What are the dynamic and maximum static forces of friction?

b) If it is at rest and you exert a force of 12.0 N sideways on it what happens?

c) If it is at rest and you exert a force of 35.0 N to the right on it, what is the acceleration of the block? Is the block accelerating (speeding up) or decelerating (slowing down)?

d) If it is sliding to the right and you exert a force of 7.50 N to the left, what is the acceleration of the block? Is the block accelerating (speeding up) or decelerating (slowing down)?

e) What force is required to make the block slide to the right and accelerate to the right at 6.70 m/s/s? Is the force to the right or the left?

f) If it is sliding to the right, but decelerating at 0.950 m/s/s, what force is acting on the block? Is the force to the right or the left?