**A 3.10 kg block of wood is on a 51.0o inclined plane where the static coefficient of friction is 0.520, and the kinetic is 0.380**

No - F|| of 23.6 N is much bigger than FFs of 9.95 N

-2.31 m/s/s (Down)

+6.80 m/s/s (Up)

+2.41 N (Up)

+25.3 N (Up)

a. Will the block stay on the plane if it is initially at rest? Back up your answer with numbers.

b. What is the acceleration of the block if it is sliding down the plane and there is a force of 9.20 N up the plane?

c. What is the acceleration of the block if it is sliding up the plane and there is a force of 52.0 N up the plane?

4.What applied force would cause the block to slide down the plane with an acceleration of 4.50 m/s/s down the plane?

e. What applied force would cause the block to slide up the plane with an deceleration of 1.80 m/s/s?