



3. Unequal forces, $\mathbf{F}_1 = -20 \text{ N}$, and $\mathbf{F}_2 = +30 \text{ N}$, push on a mass but it does not begin to move. Acting on the mass, what is the force **vector** of static friction, \mathbf{F}_f ?

a) $+10 \text{ N}$ b) $+50 \text{ N}$ c) -50 N *d) -10 N e) $+600 \text{ N}$

4. The mass of Problem 1 is moving with a constant speed and direction on a rough surface. Acting on the mass, what is the force **vector** of sliding friction, \mathbf{F}_f ?

a) $+10 \text{ N}$ b) $+50 \text{ N}$ c) -50 N *d) -10 N e) $+600 \text{ N}$