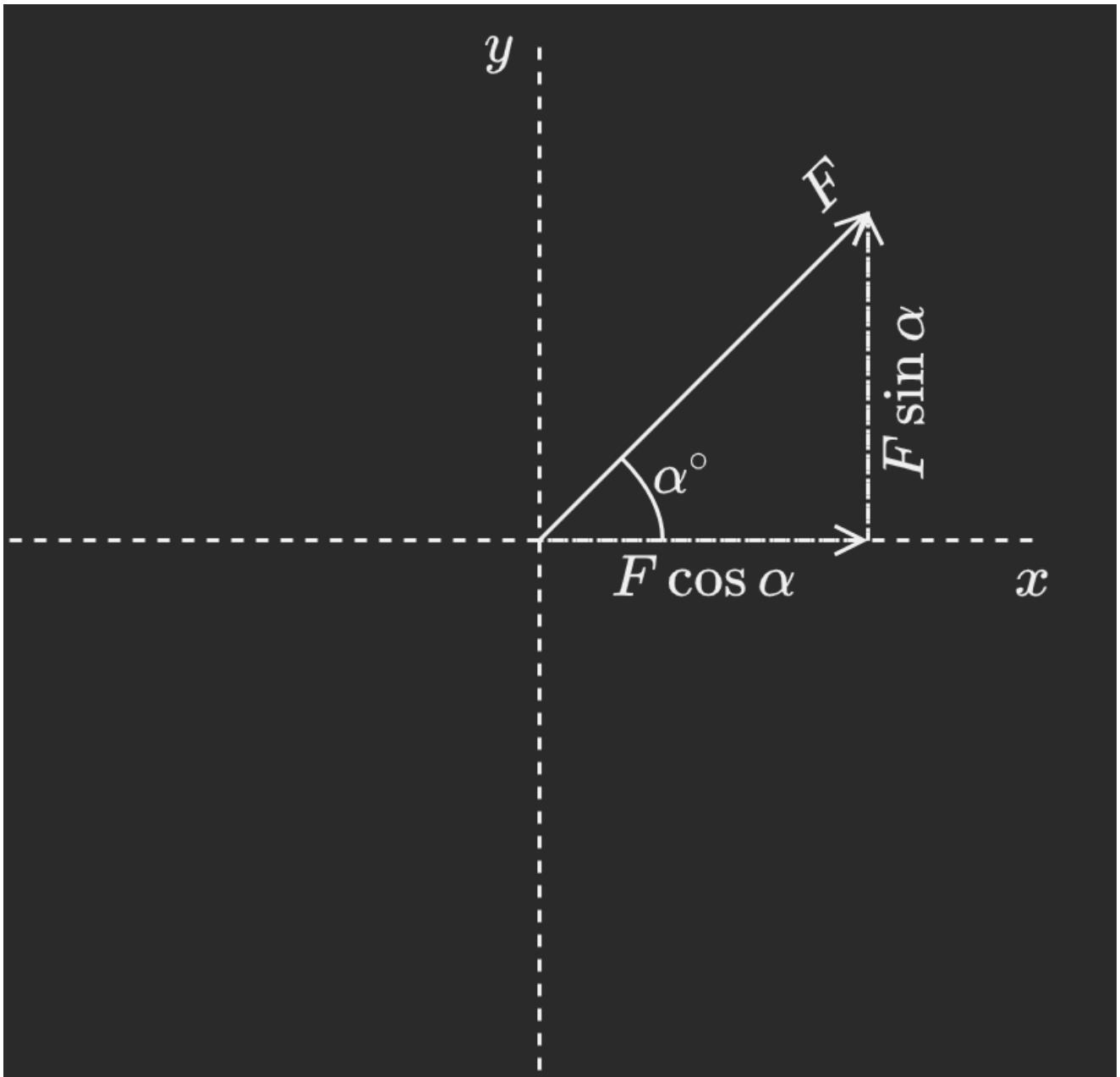


Resolving Forces



Friction

Friction acts to oppose motion on rough surfaces.

The formula for friction is as follows:

$$F_r \leq \mu R$$

Friction will only give as much force as is necessary to oppose motion until it cannot provide more resistance, where its max is μR , at which point the motive force will begin moving the object.

Slopes

When dealing with objects on slopes, it is important to resolve all forces parallel and perpendicular to the slope, as to make it so much easier.

On a slope, gravity is $mg \sin \alpha$ \parallel to the slope and $mg \cos \alpha$ \perp to the slope.