Answer on Question #40931, Physics, Mechanics | Kinematics | Dynamics

Question:

The coefficient of kinetic friction:

A. is in the direction of the frictional force

B. is in the direction of the normal force

C. is the ratio of force to area

D. can have units of Newtons

E. is none of the above

Answer:

The coefficient of kinetic friction is defined as the ratio of force of friction to the normal force,

$$\mu = \frac{F}{N}$$

The coefficient of kinetic friction is scalar quantity that are fully described by a magnitude and haven't direction. And it can't have dimension of force.

Answer: E. is none of the above