Answer on Question #48161, Physics, Mechanics | Kinematics | Dynamics

Question:

The ratio of pressure force L to friction force D for an object A in contact with object B is L/D = 10. what is the coefficient of friction of A/B?

Answer:

Coefficient of friction equals:

$$\mu = \frac{F_{fr}}{N}$$

where F_{fr} friction force, N is normal force.

The ratio of pressure force L to friction force D equals:

$$\frac{L}{D} = \frac{N}{F_{fr}}$$

Therefore:

$$\mu = \frac{1}{\dfrac{L}{D}} = \frac{1}{10} = 0.1$$

Answer: 0.1