

Using the Coefficient of Friction

$$\text{Force of Friction} = \text{Cof} \times \text{Force that pushes the surfaces together}$$

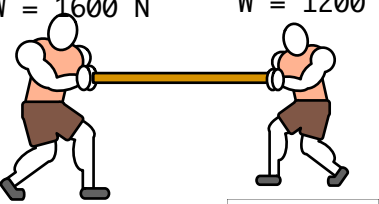

Calculate the friction for each person and circle who would win the tug of war.

A


A

Andre the Giant
W = 1600 N

Achilles
W = 1200 N

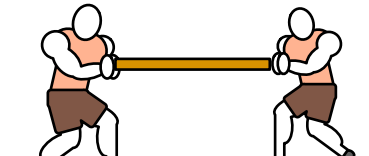

Bunny Slippers
CoF = 0.25




Air Max
CoF = 0.5

Hulk Hogan
W = 1200 N

Odysseus
W = 1000 N

Emerica Reynolds
CoF = 0.75



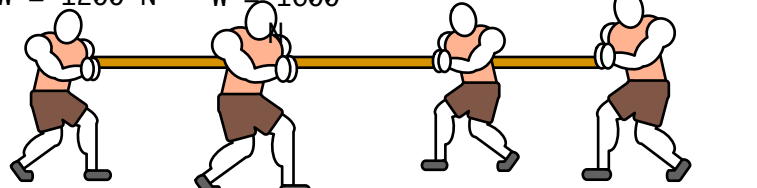

Cleats
CoF = 1.0

Hulk Hogan
W = 1200 N


Andre the Giant
W = 1600

Odysseus
W = 1000 N


Achilles
W = 1200 N


Cleats
CoF = 1.0



Bunny Slippers
CoF = 0.25



Air Max
CoF = 0.5



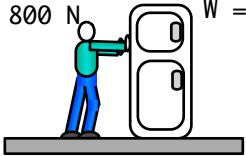
Emerica Reynolds
CoF = 0.75

(Show your calculation)

Will this fridge get delivered?

Mover
W = 800 N

Fridge
W = 1,200 N



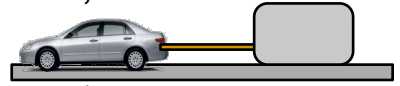
Mover's Shoes
CoF = 0.8

Bottom of Fridge
CoF = 0.5

Are the car's tires slipping?

Car
W = 10,000 N

Block
W = 24,000 N



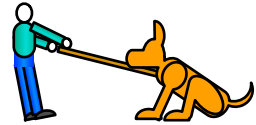
Car's Tires
CoF = 1.0

Bottom of Block
CoF = 0.5

Will this dog be going for a walk?

Person
W = 600 N

Dog
W = 900 N



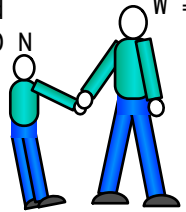
Person's Shoes
CoF = 0.6

Dog's Paws
CoF = 0.5

Is this child going shopping?

Child
W = 300 N

Parent
W = 700 N



Child's Shoes
CoF = 0.8

Parent's Shoes
CoF = 0.5