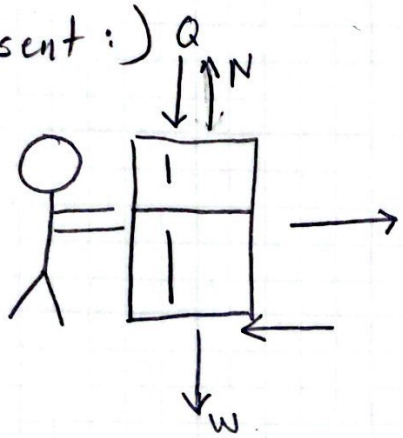
3-9 - Prep | 11/13/22 | Isaac Abella

Problem) A: Micheal pushes on the refrigerator with a force of 81 lb. determine the friction force.

B: Determine the minimum force Micheal must push to move the fridge.

C: Micheal gets the fridge moving. what's the friction force?

Represent:)



Organize)

268 lb fridge

$\mu_s = .38$

$\mu_k = .23$

Solution:

A) Force push - 81 < ~~268 lb~~ 101.84 lb

$268 \cdot .38 = 101.84$ lb

$\Sigma F_y = 0 \quad N - W - Q = 0, \quad N = W + Q$

$N = F$ so the friction force = 81 lb

B). Determine the minimum force Micheal Must push

$F = \mu_s N = 268 \cdot .38 = 101.84 \approx$ 102 lb

c) what's the friction Force?

$\mu_k = .23$

so... $N \cdot \mu_k = 268 \cdot .23 =$ 61.64 lb.