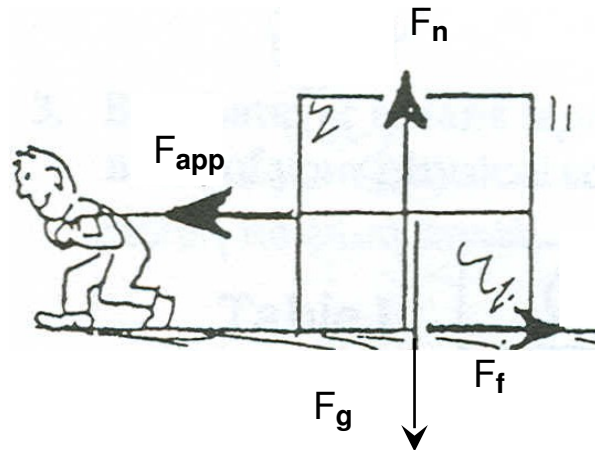


ACCELERATION



1a The sliding friction is 250N, and the man pulls with a force of 300N. The crate begins to accelerate and the net force on it is no longer zero. Calculate the net force on the crate.

_____ 1a

1b If the mass of the crate is 50Kg, calculate the acceleration

_____ 1b

2a The man now pulls with a force of 350N and the acceleration increases. Calculate the new net force on the crate.

_____ 2a

2b Calculate the acceleration

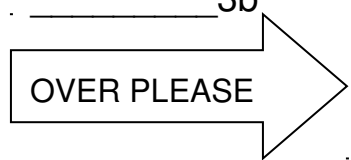
_____ 2b

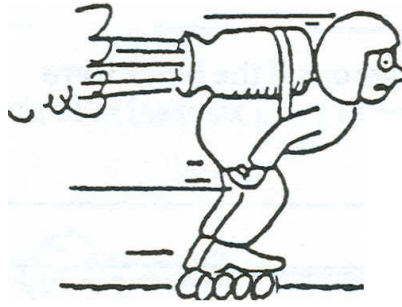
3a The man now pulls with a force of 500N and the acceleration increases. Calculate the new net force on the crate.

_____ 3a

3b Calculate the acceleration

_____ 3b





4a Skylar the skater is propelled by rocket power. Assume the force of friction is 50N. Suppose the force exerted by the rocket is 100N. Calculate the net force on the Skylar.

_____ 4a

4b If the total mass is 25Kg, calculate the acceleration

_____ 4b

5a Suppose the force exerted by the rocket is 200N. Calculate the net force on the Skylar.

_____ 5a

5b Calculate the acceleration

_____ 5b

6a What net force would be needed to accelerate Skylar at 10m/s^2 ?

_____ 6a

6b What total force would be needed to accelerate Skylar at 10m/s^2 and overcome friction?

_____ 6b

