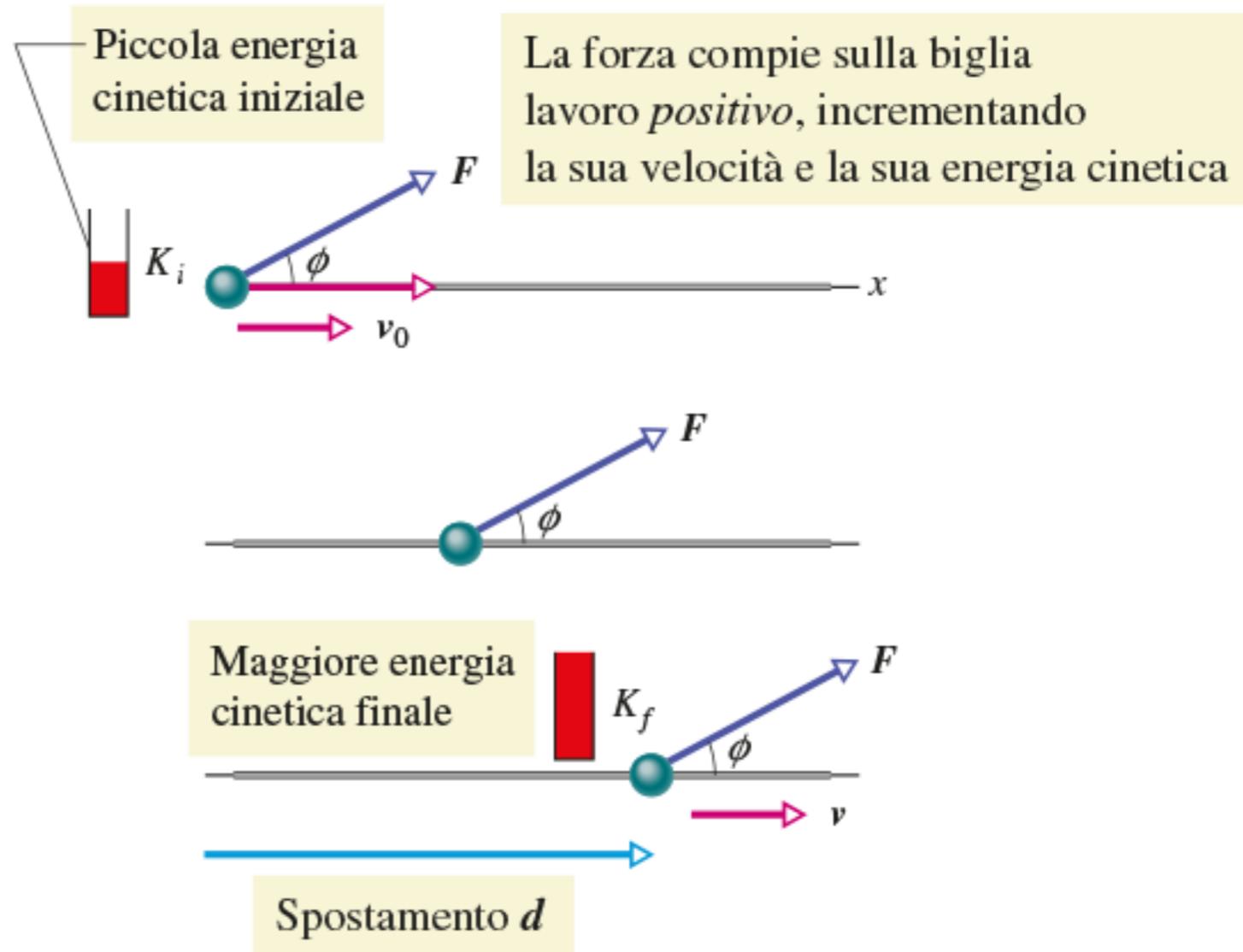
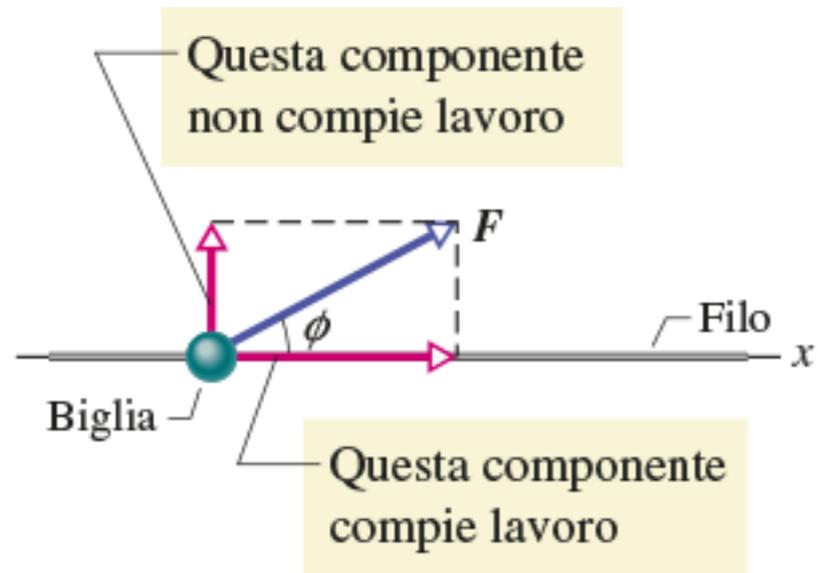
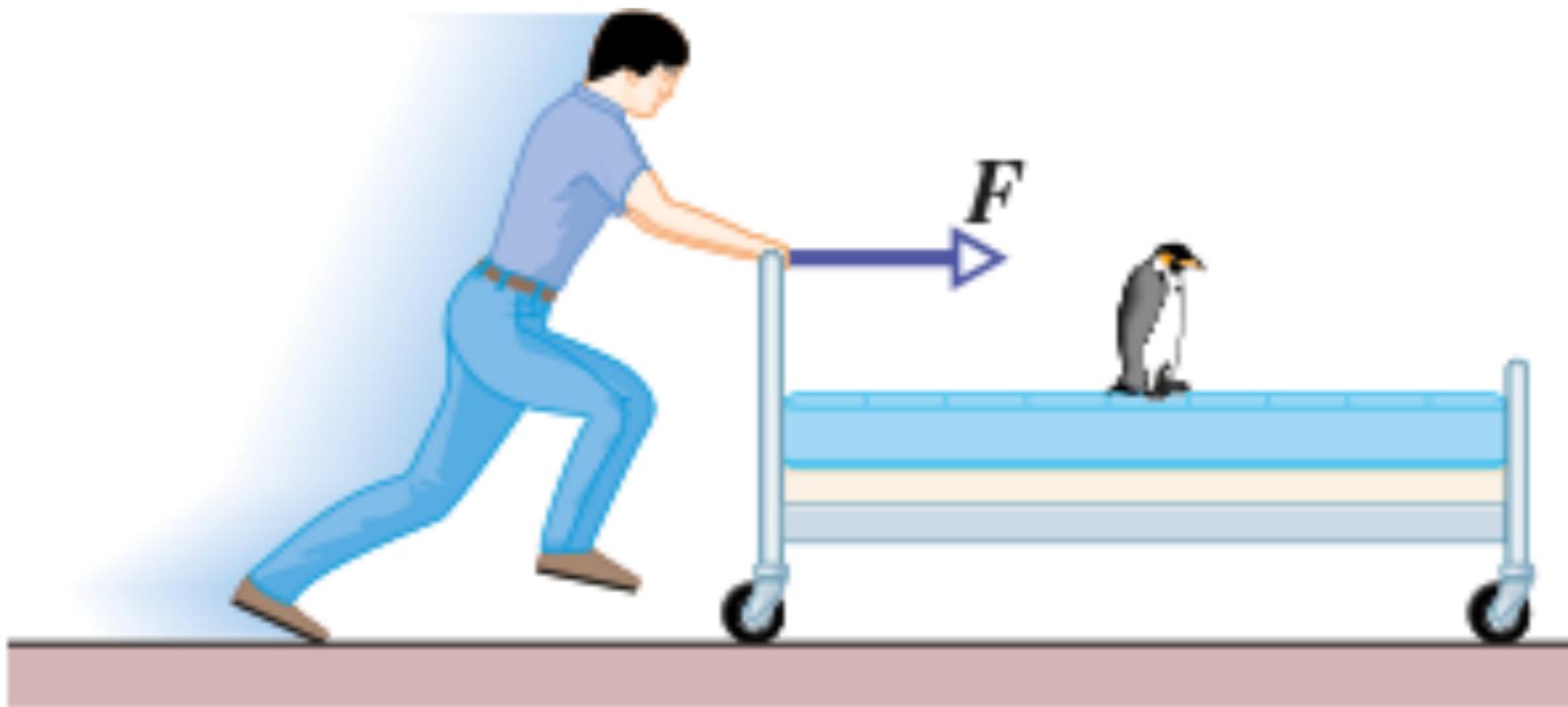


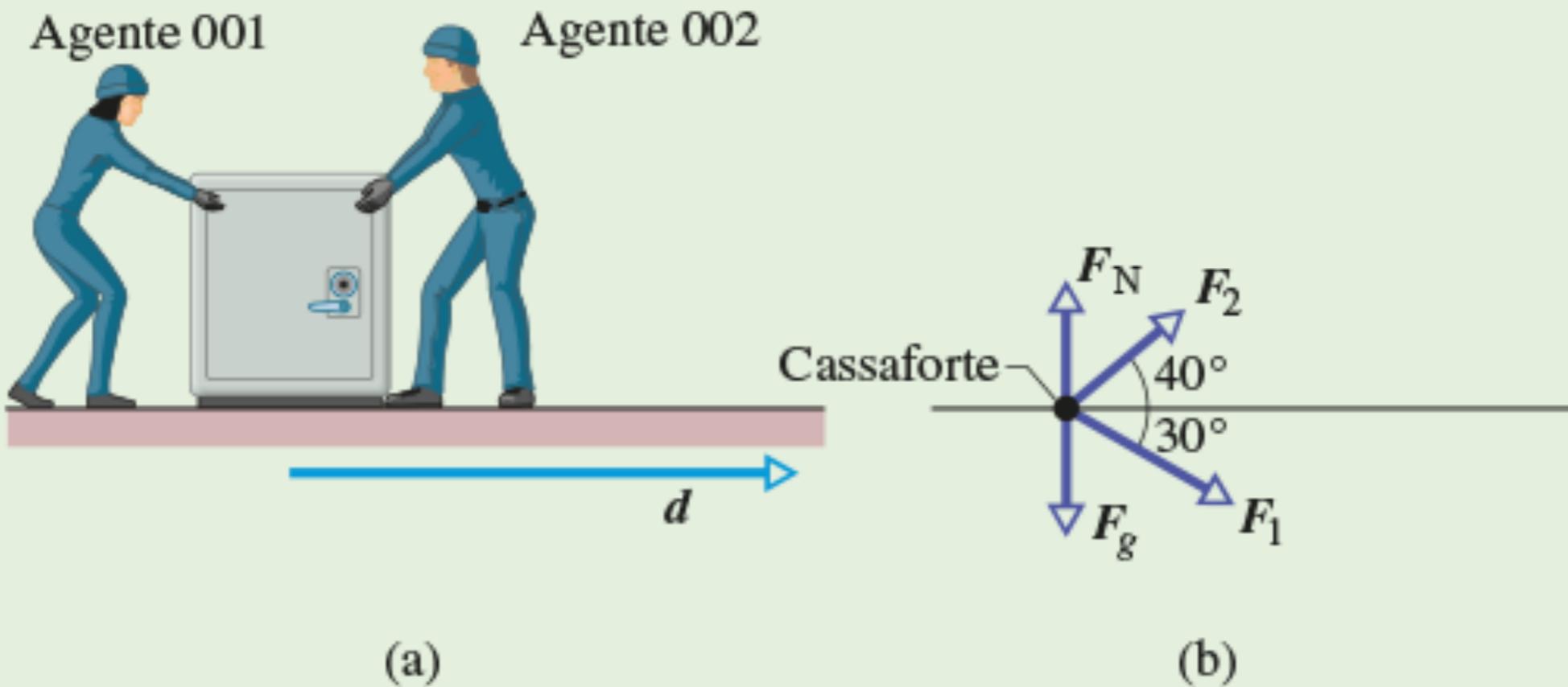


Courtesy Library of Congress

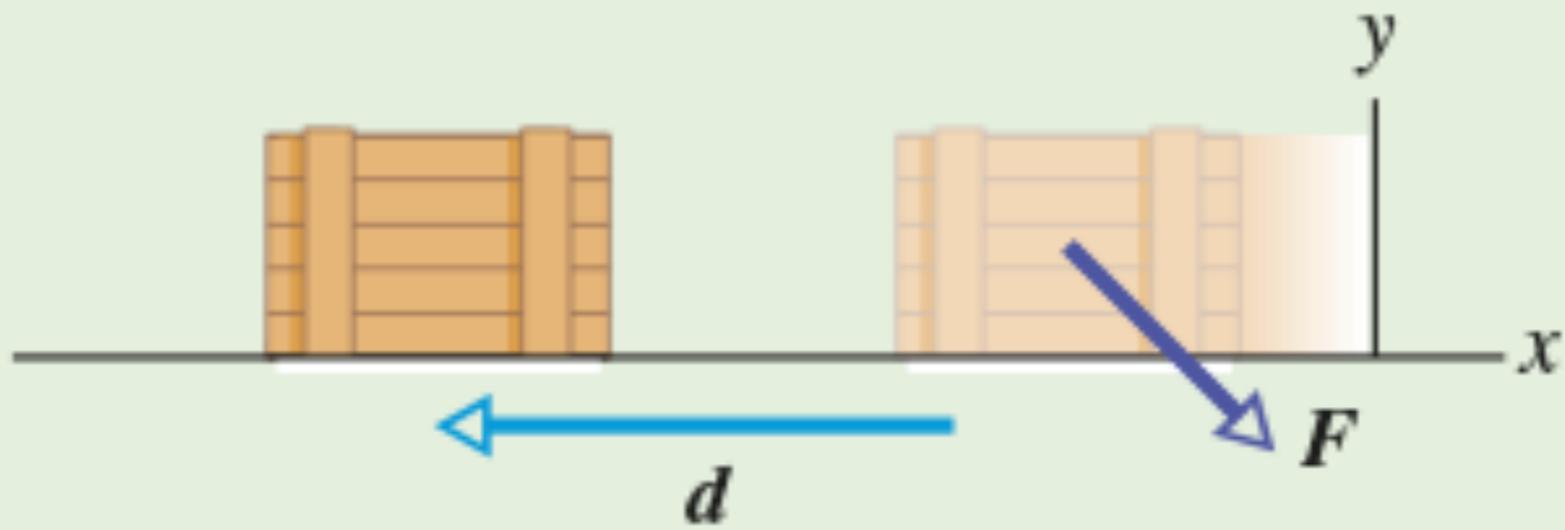


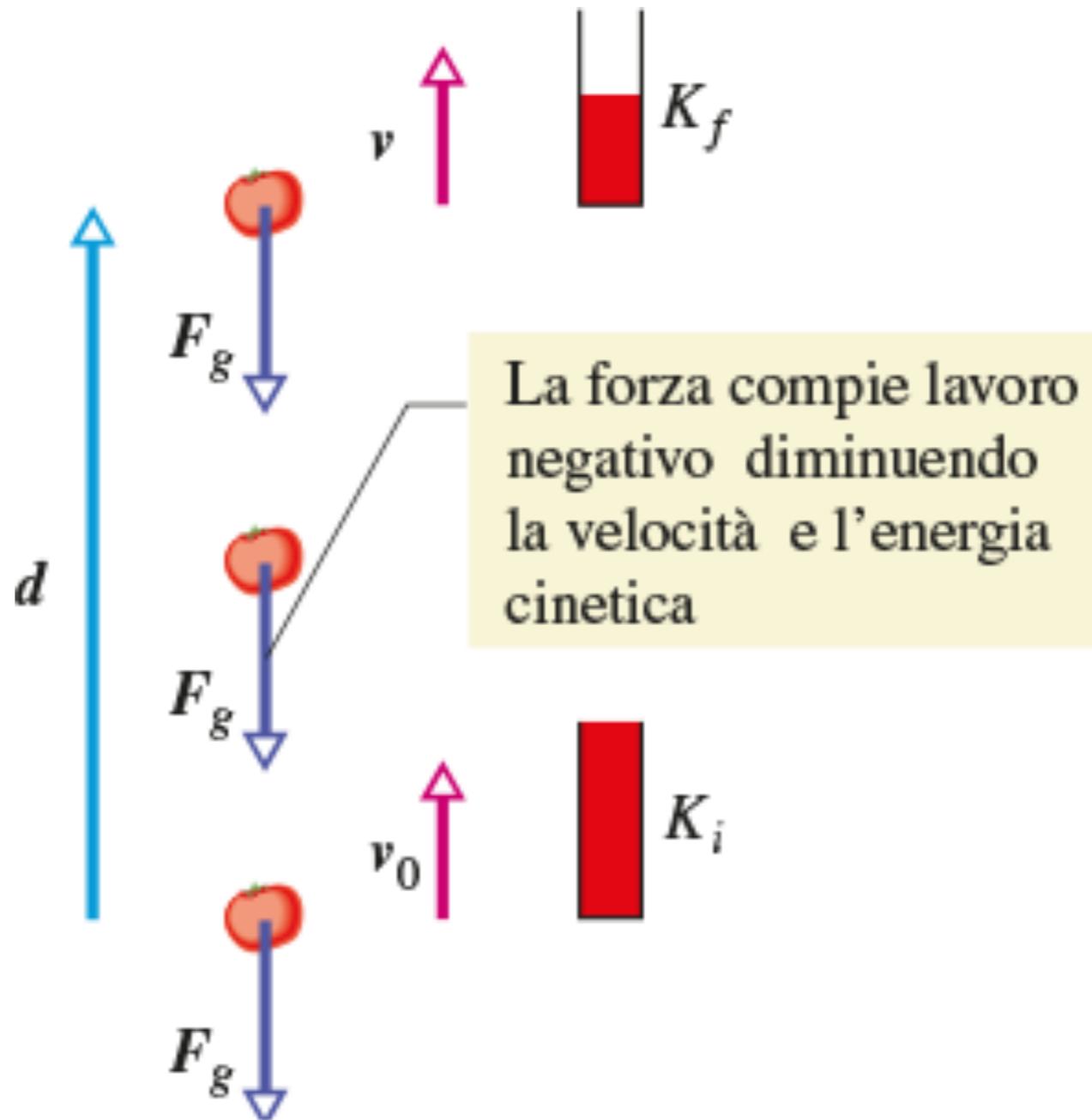


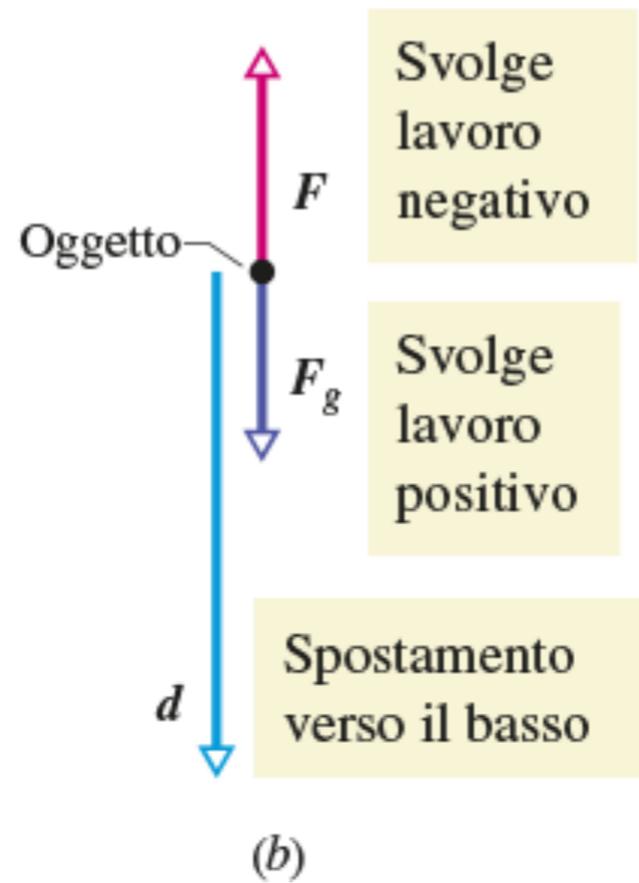
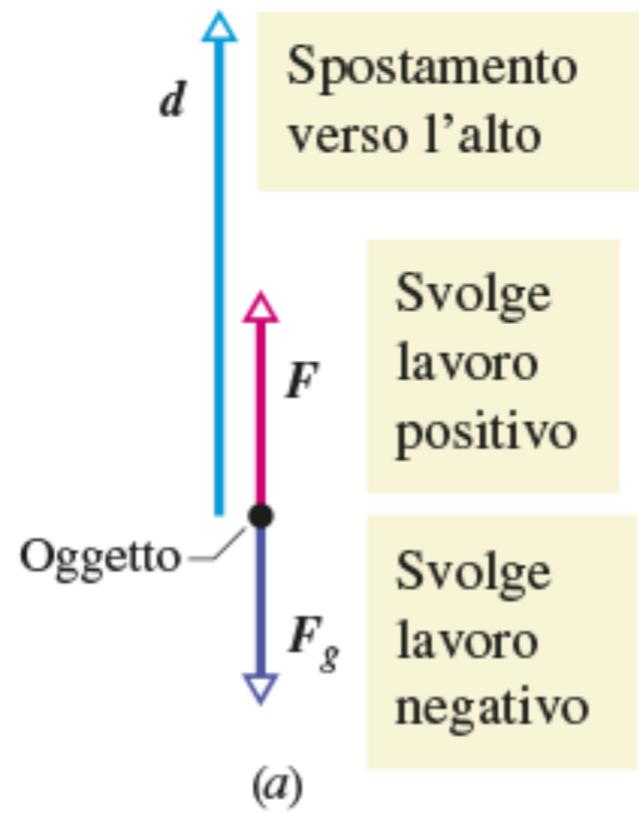
Solo le componenti della forza
parallele allo spostamento compiono lavoro

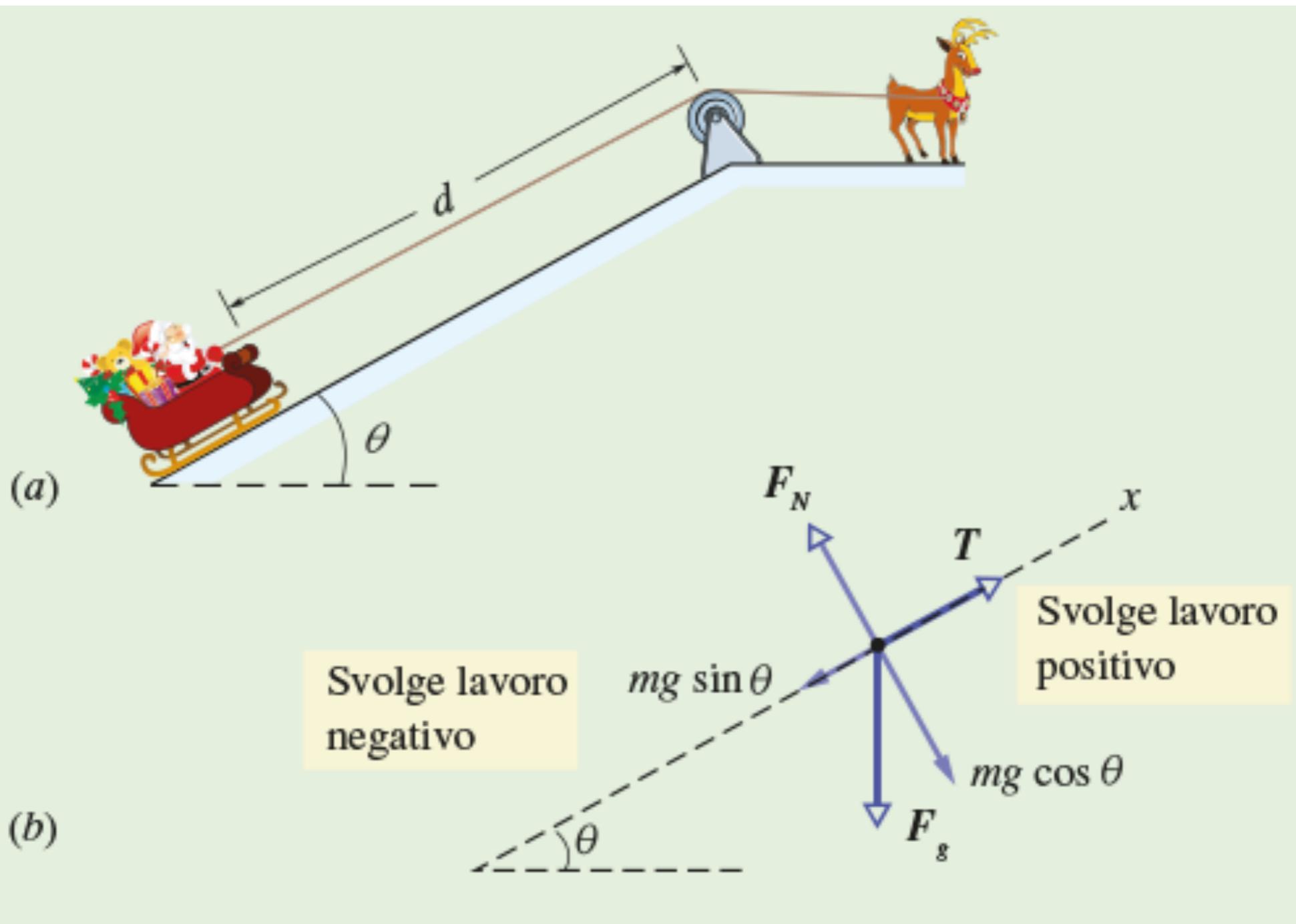


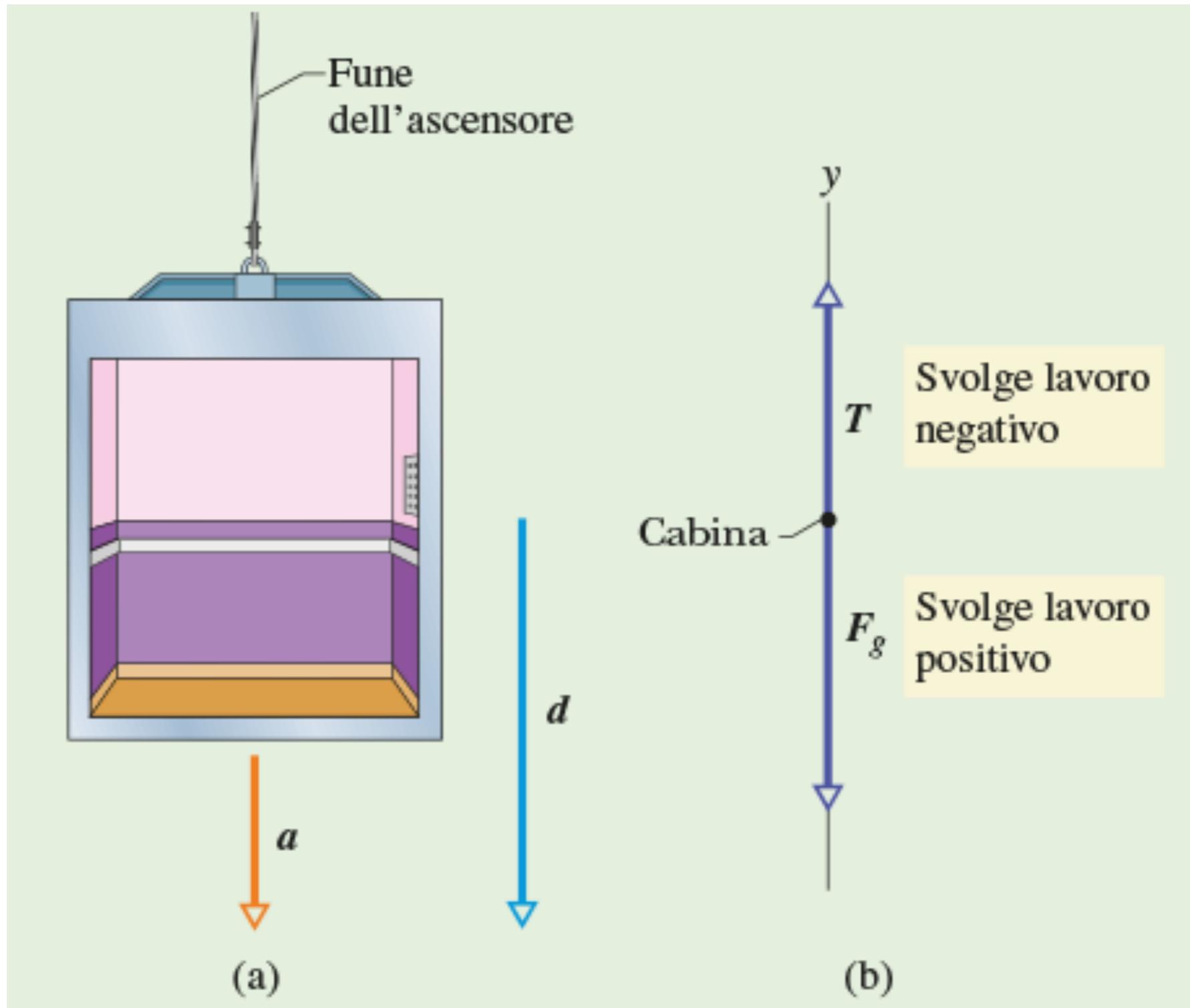
La componente parallela allo spostamento
compie lavoro negativo sulla cassa rallentandola

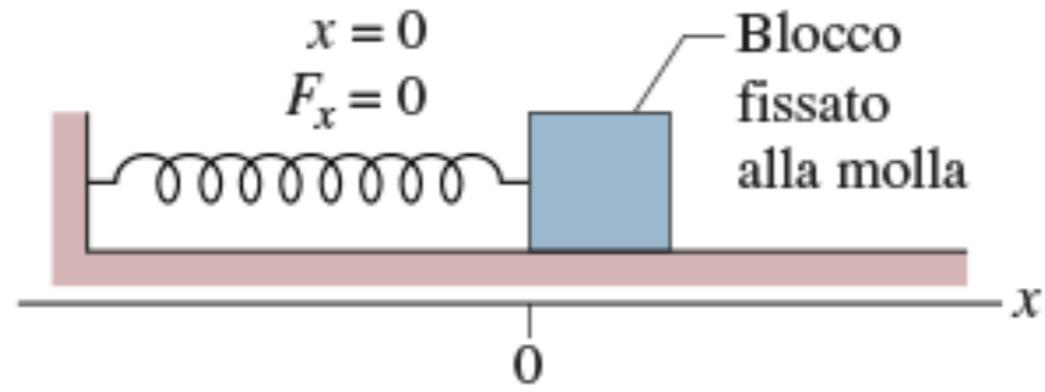




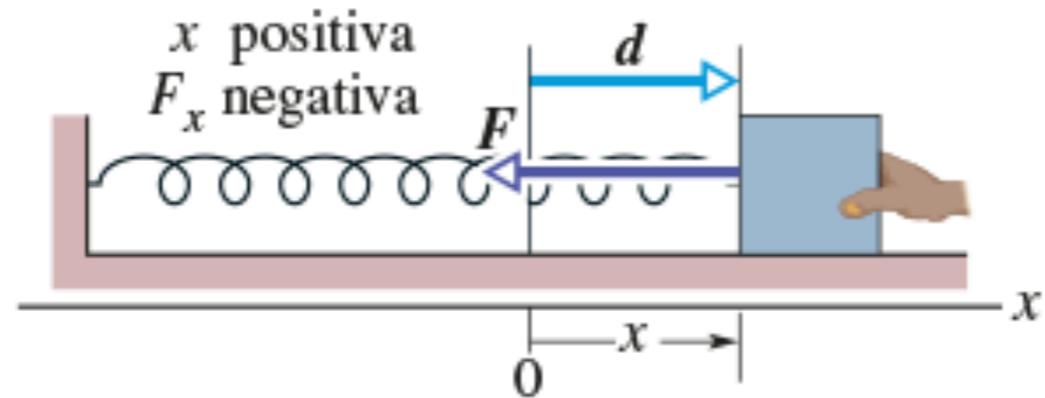




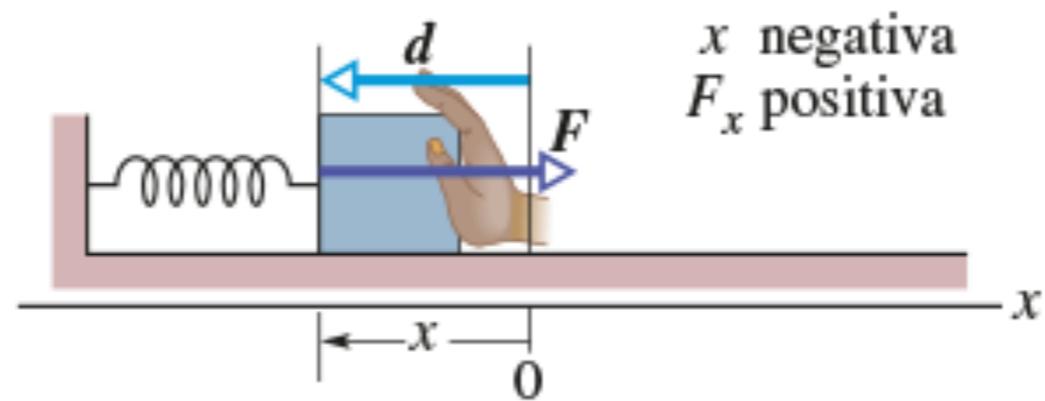




(a)



(b)

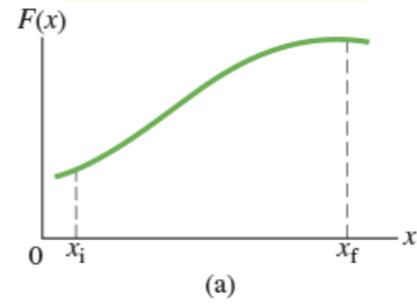


(c)

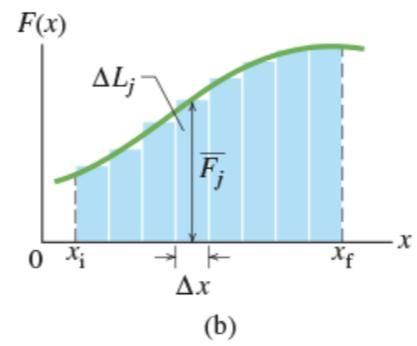
La forza elastica compie lavoro negativo
riducendo velocità ed energia cinetica del blocco



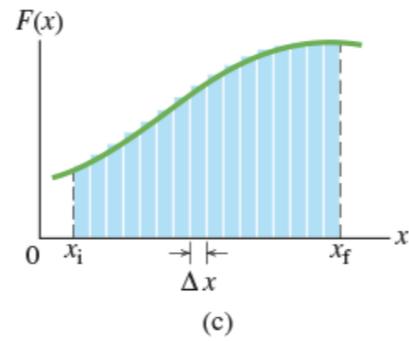
Il lavoro è dato dall'area sottesa dalla curva



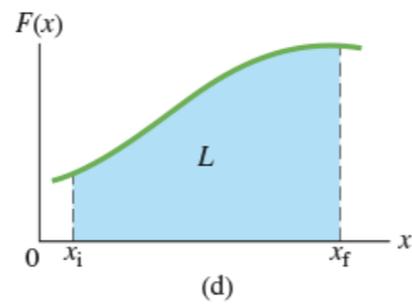
Possiamo approssimare l'area totale alla somma delle aree di questi rettangoli

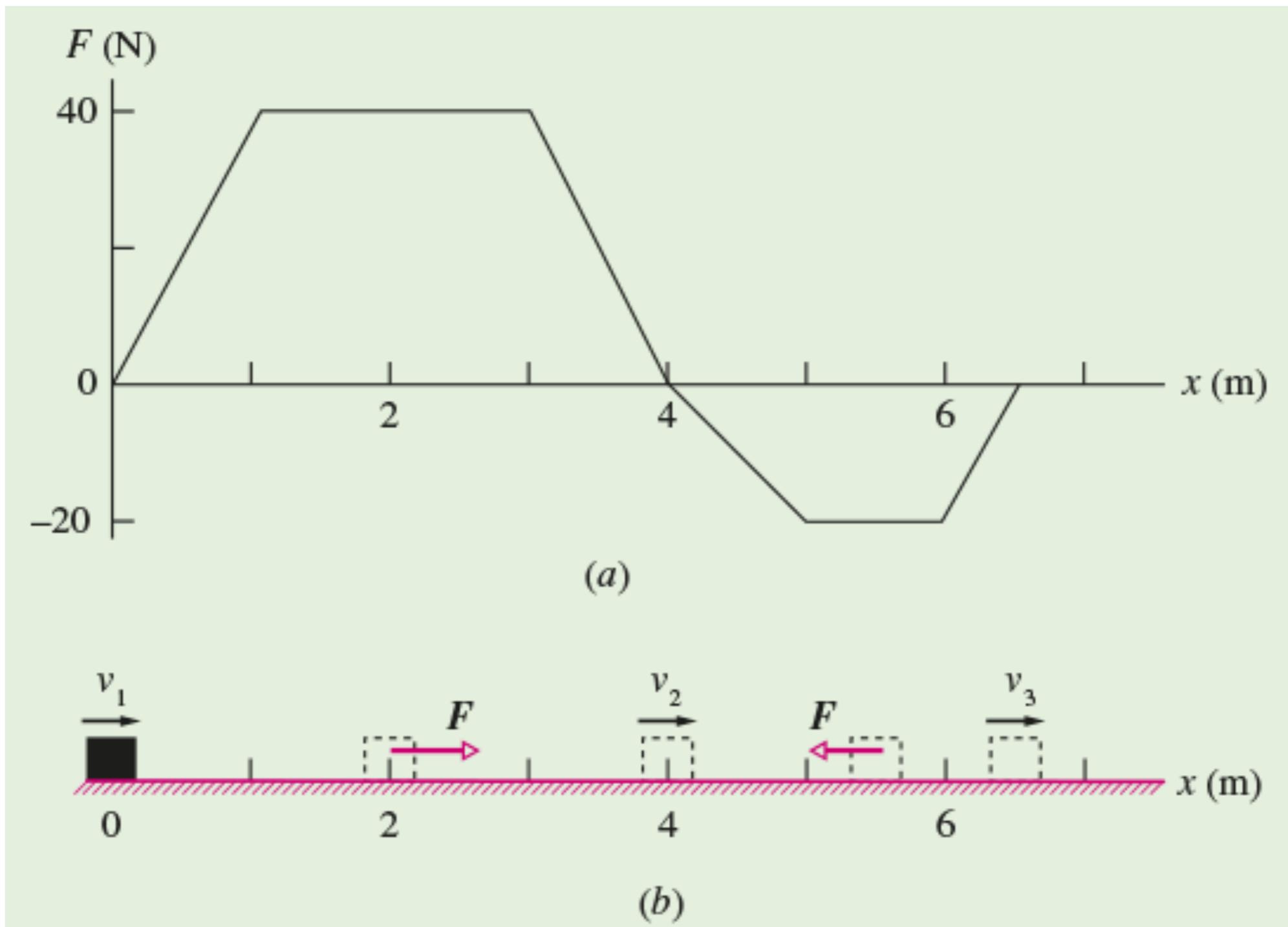


Miglioriamo l'approssimazione con rettangoli più numerosi e più stretti



Ottimale è far tendere a zero la larghezza dei rettangoli

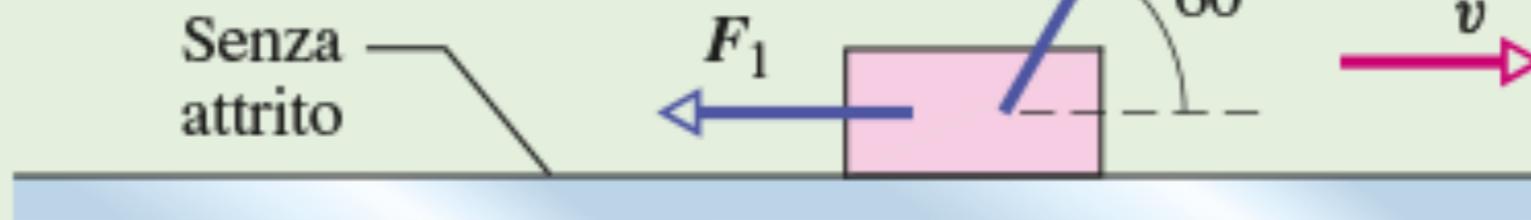




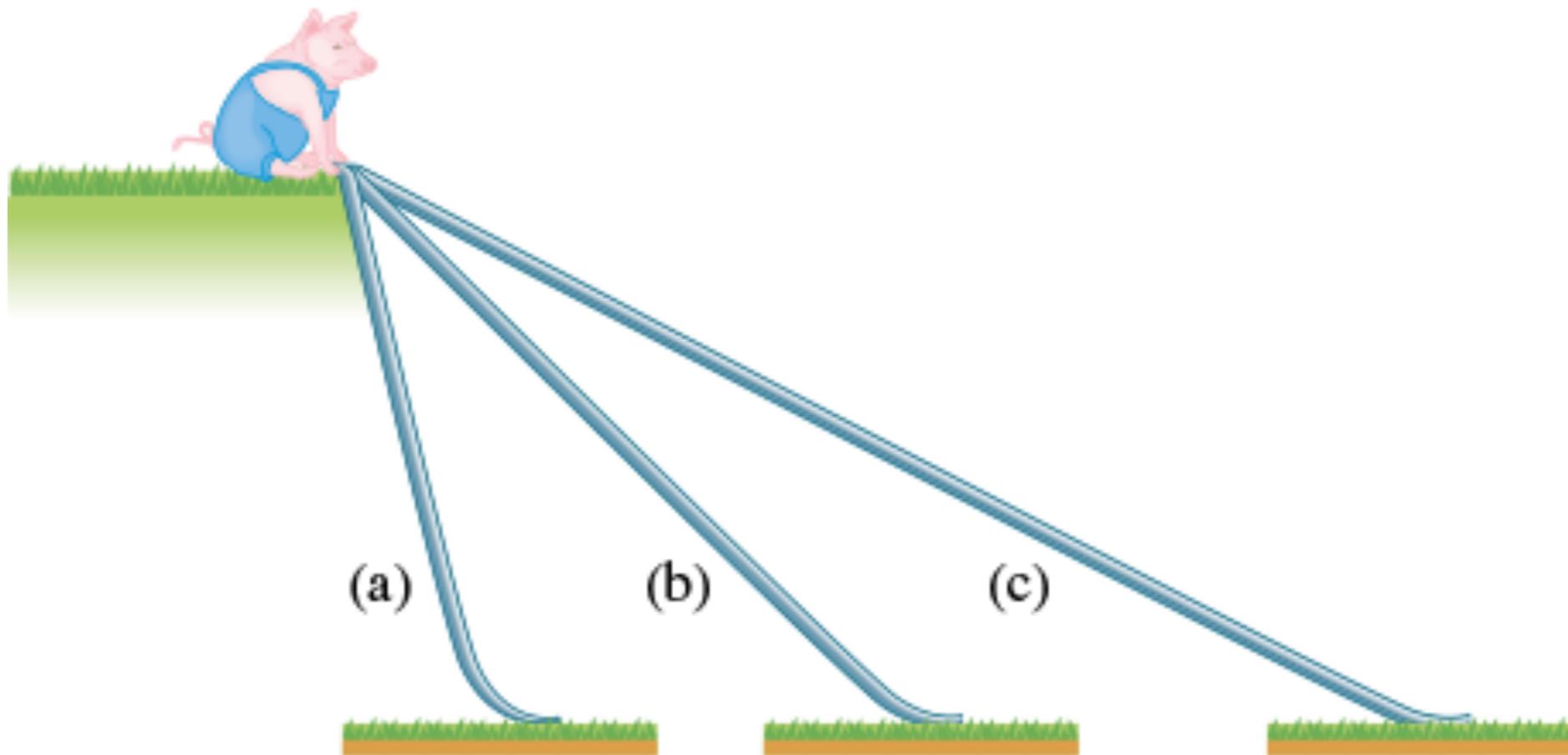


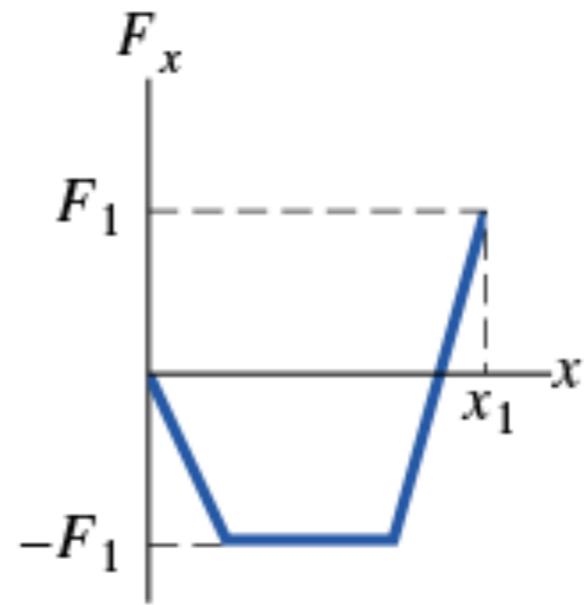
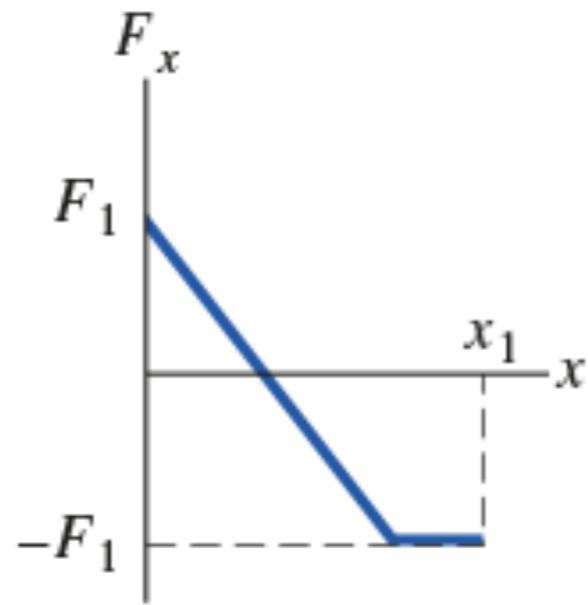
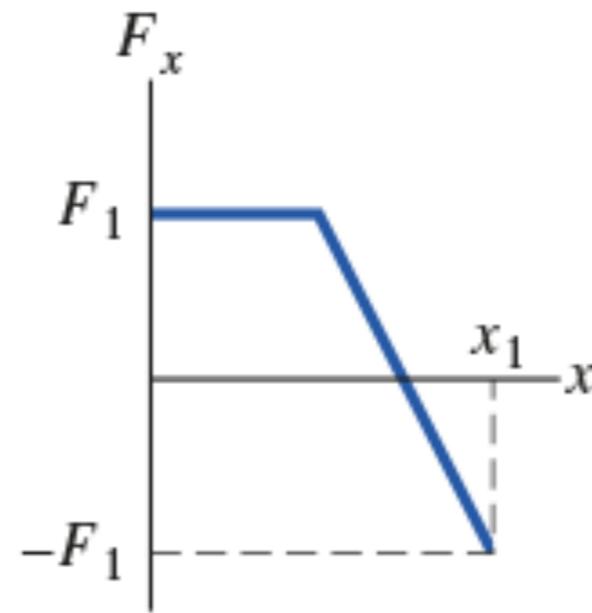
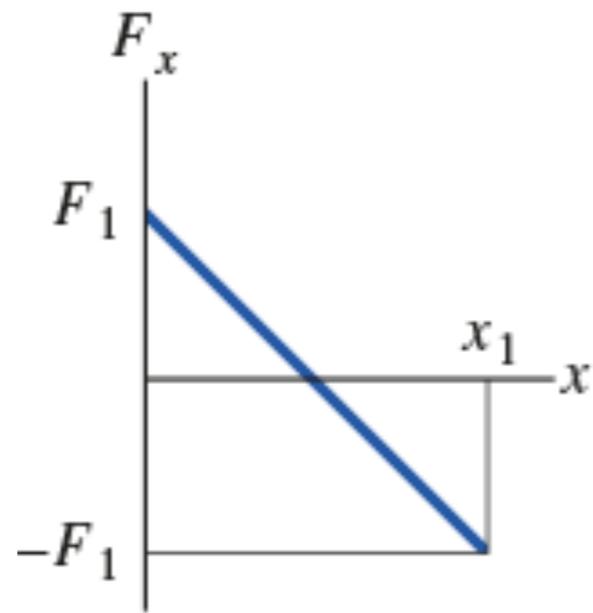
© Reglain/ZUMA

Potenza negativa.
Questa forza
sottrae energia



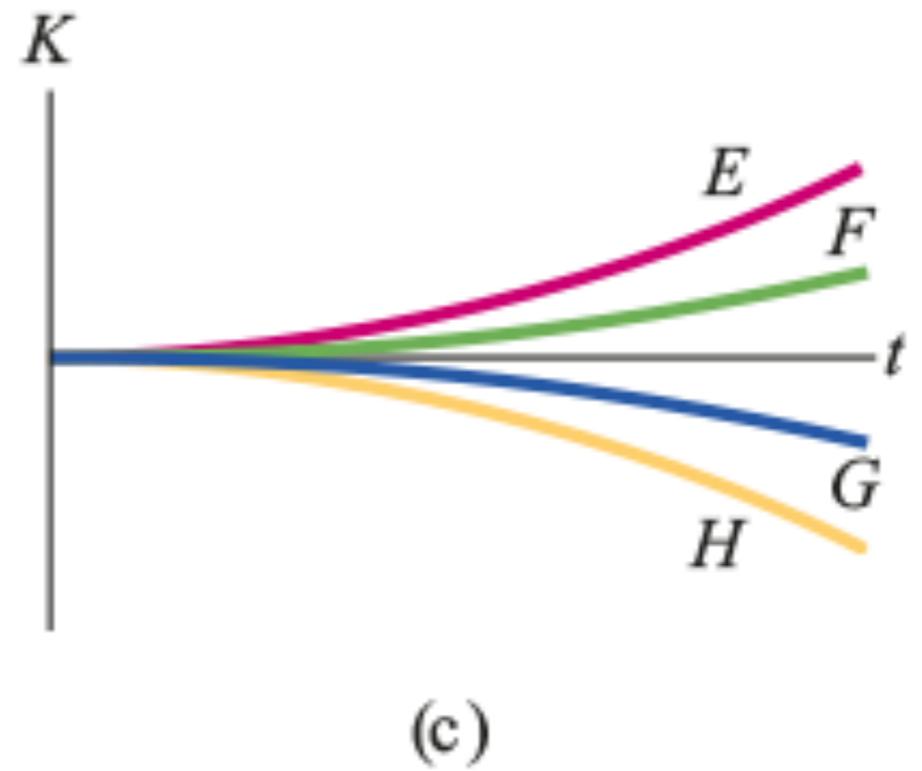
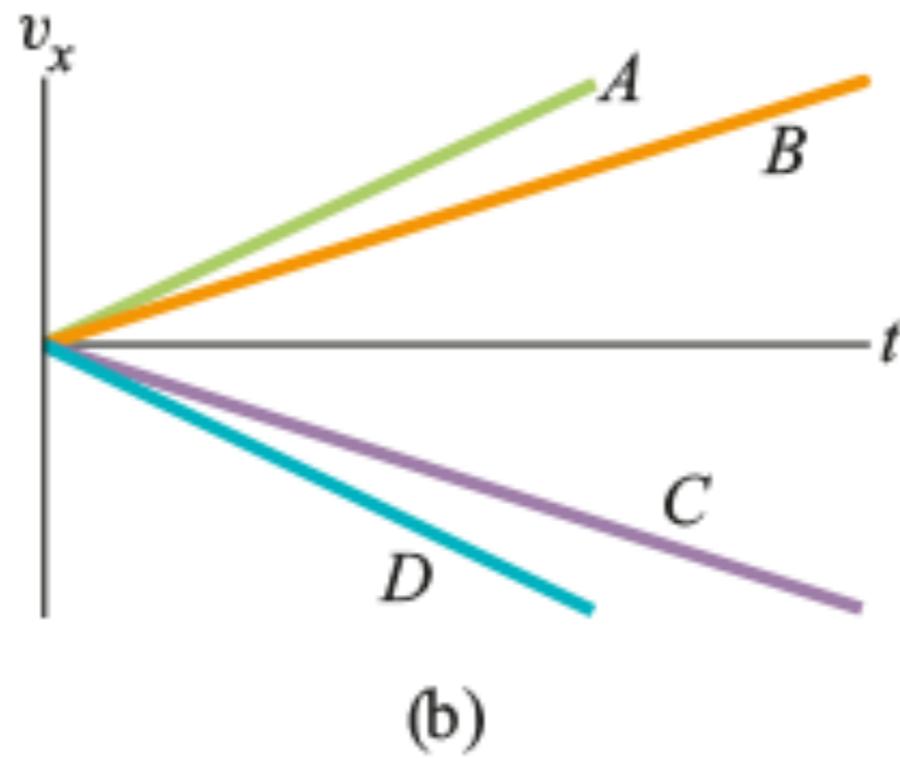
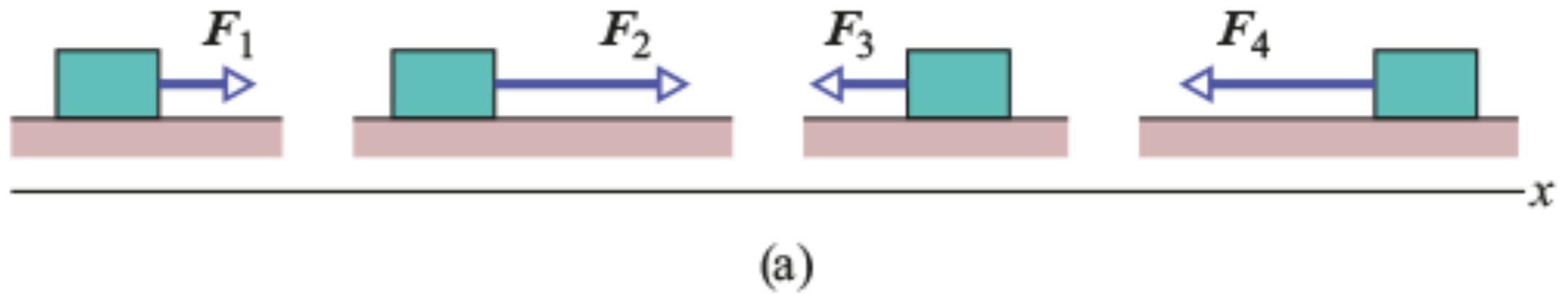
Potenza positiva.
Questa forza
fornisce energia

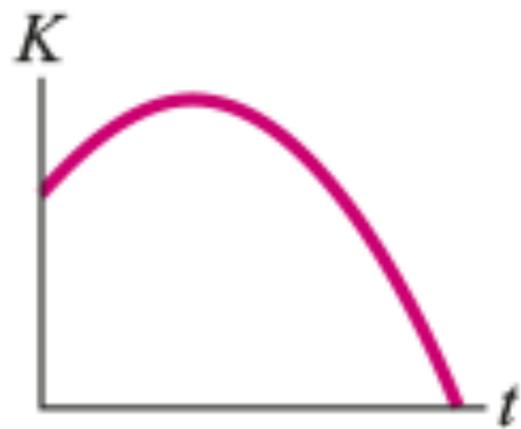




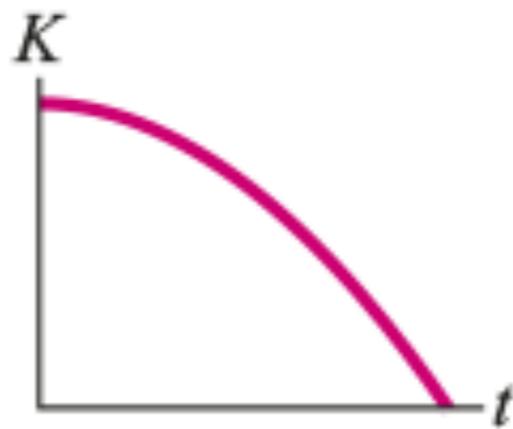
(c)

(d)

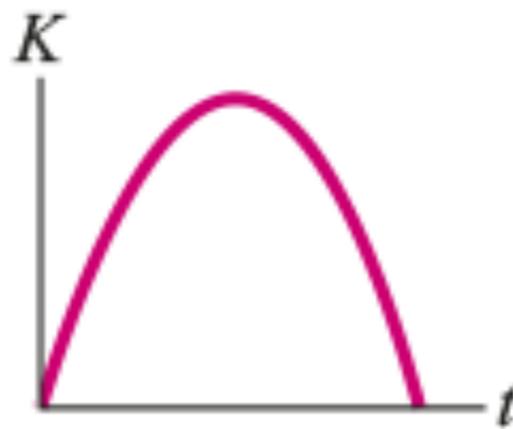




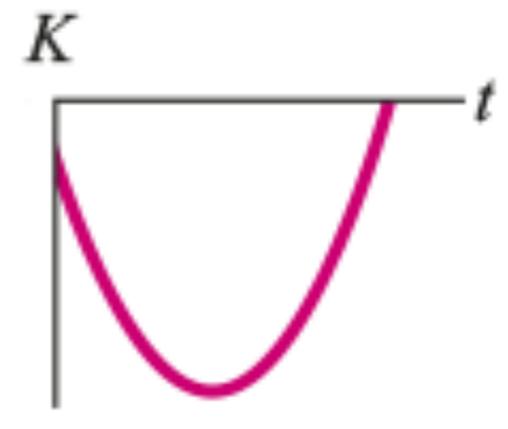
(a)



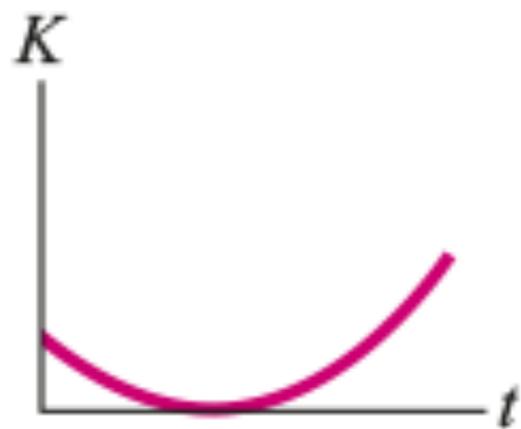
(b)



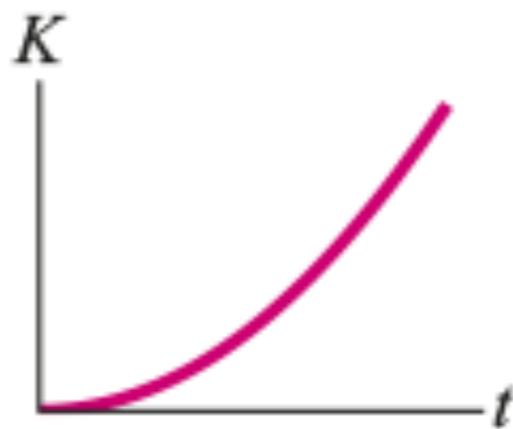
(c)



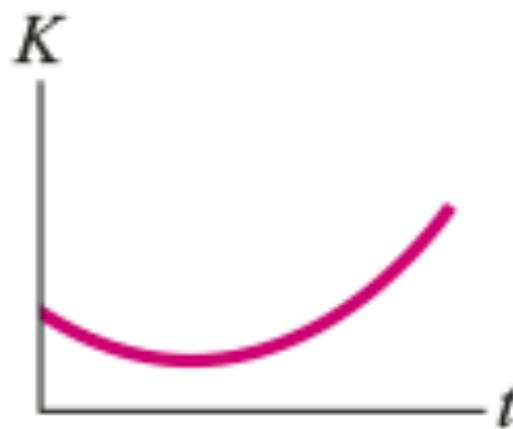
(d)



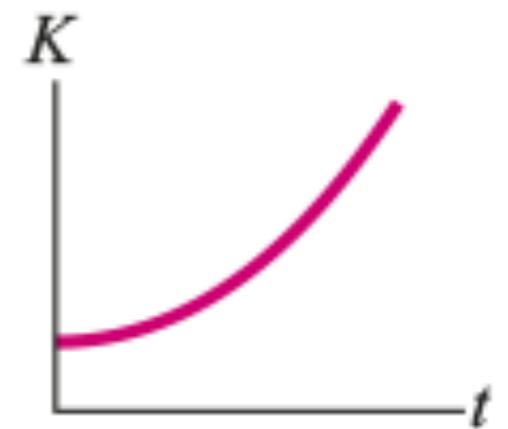
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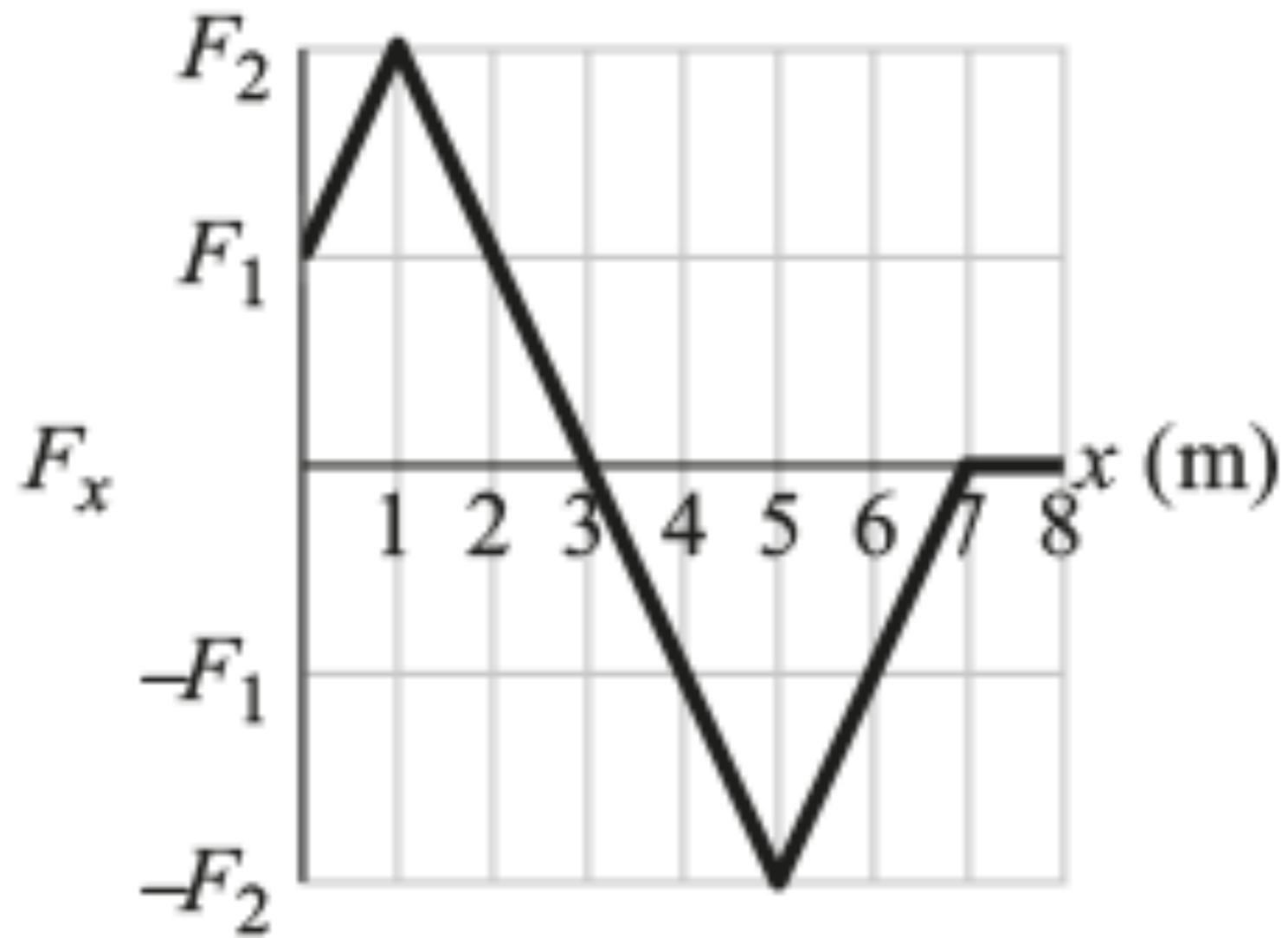
(f)



(g)



(h)





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