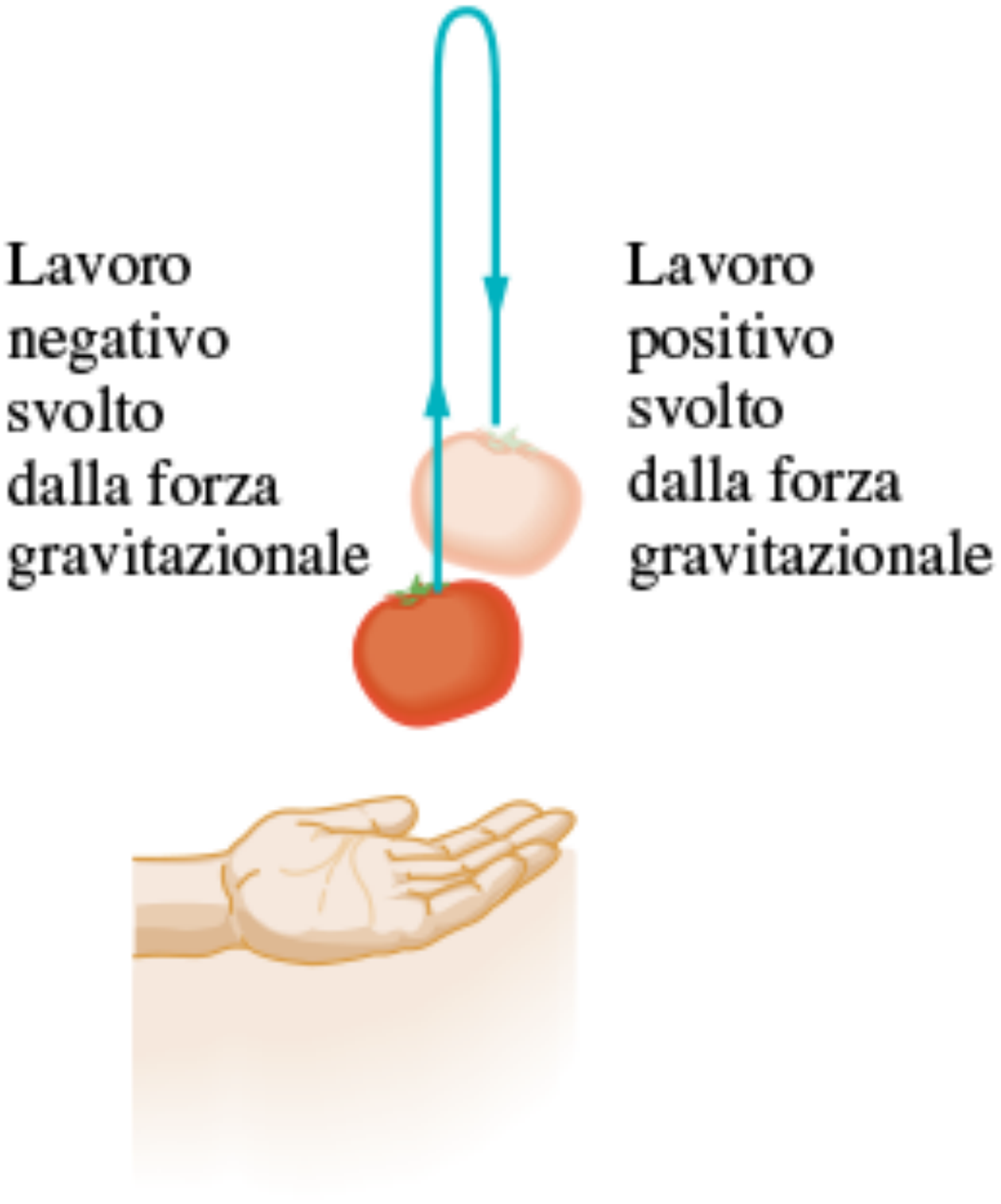
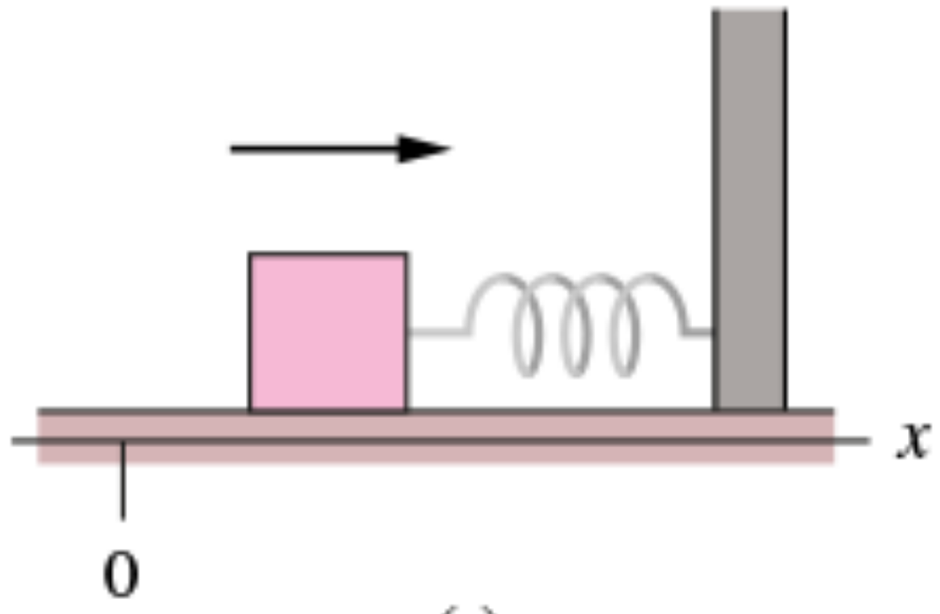
Rough Guides/Greg Roden/Getty Images, Inc.





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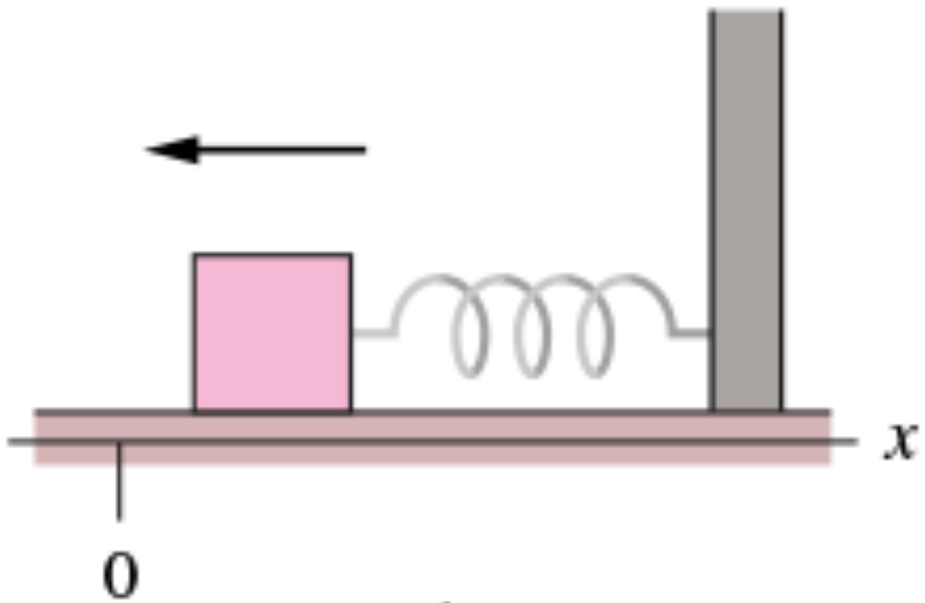

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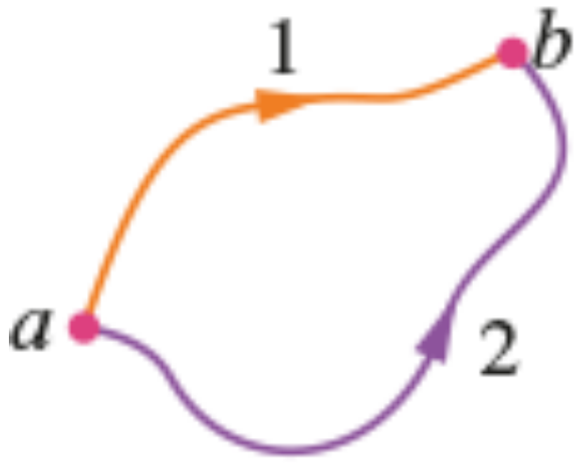
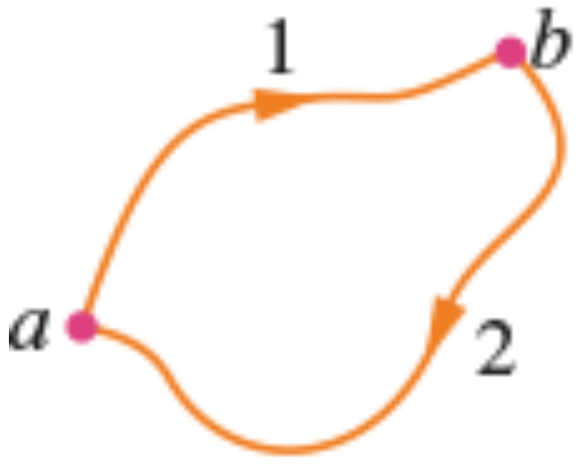


(a)

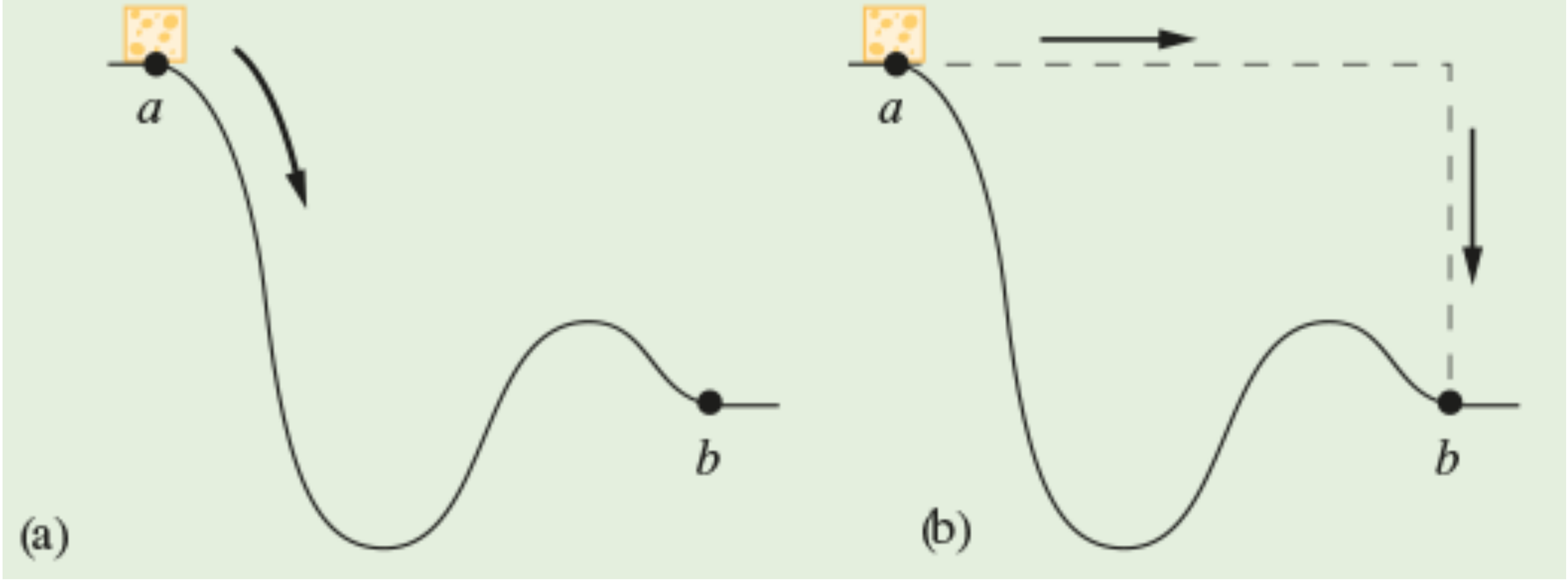
La forza è conservativa.
Per qualunque cammino
il lavoro è sempre lo stesso

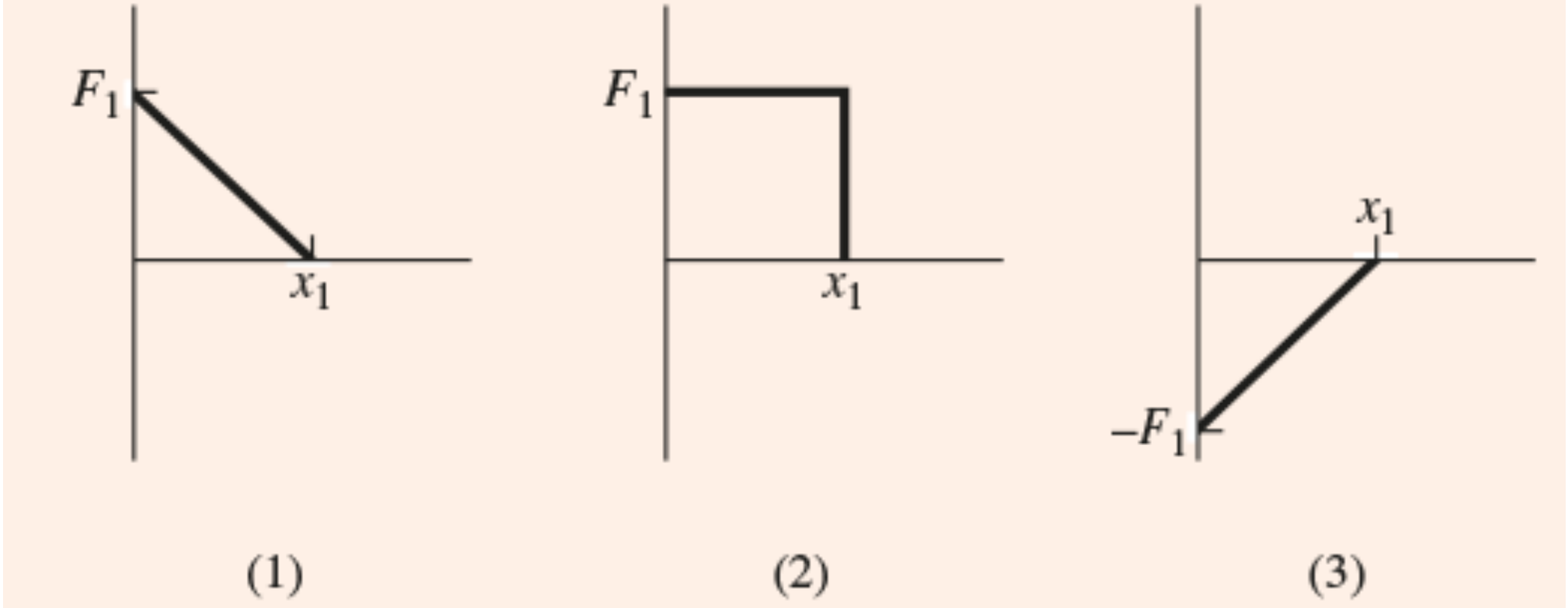


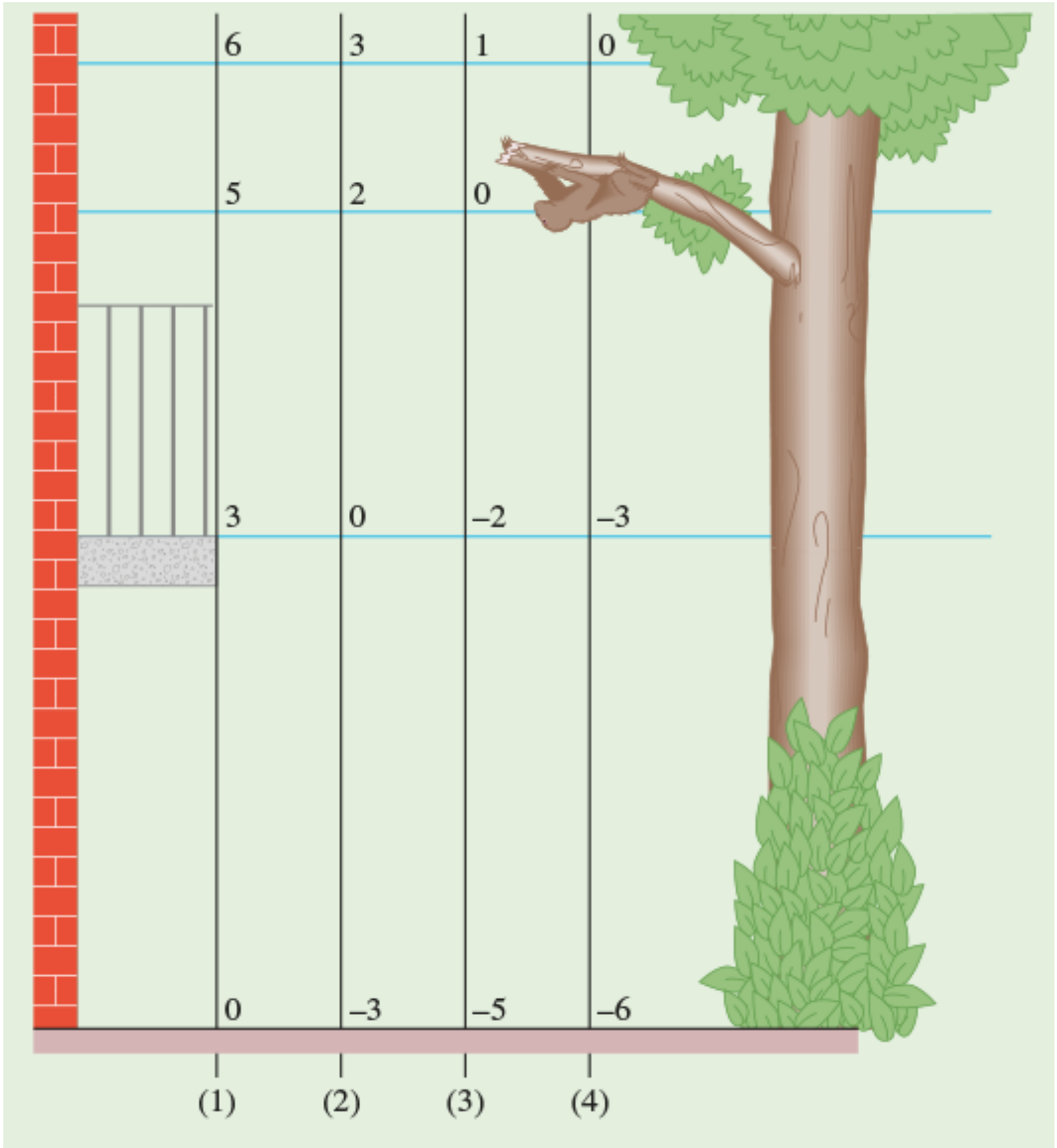
(b)

Il lavoro lungo
un cammino chiuso
è zero

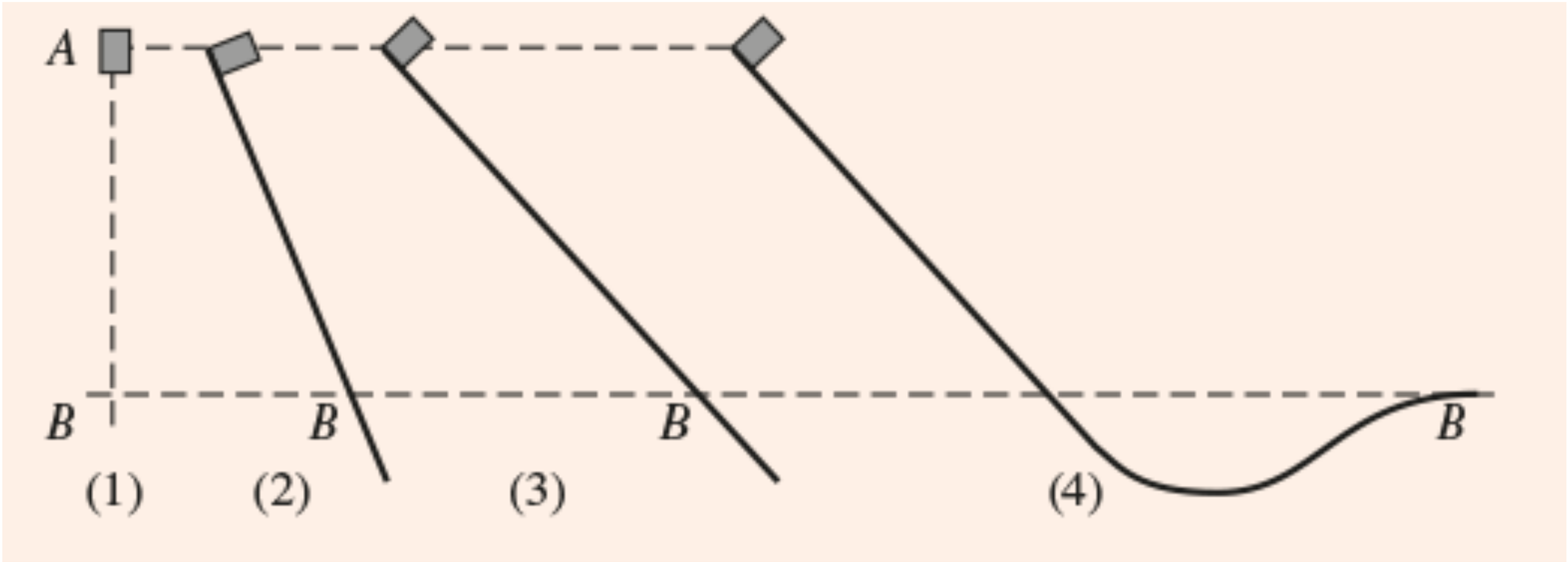
La forza gravitazionale è conservativa.
Il lavoro è indipendente dal cammino
percorso tra due punti

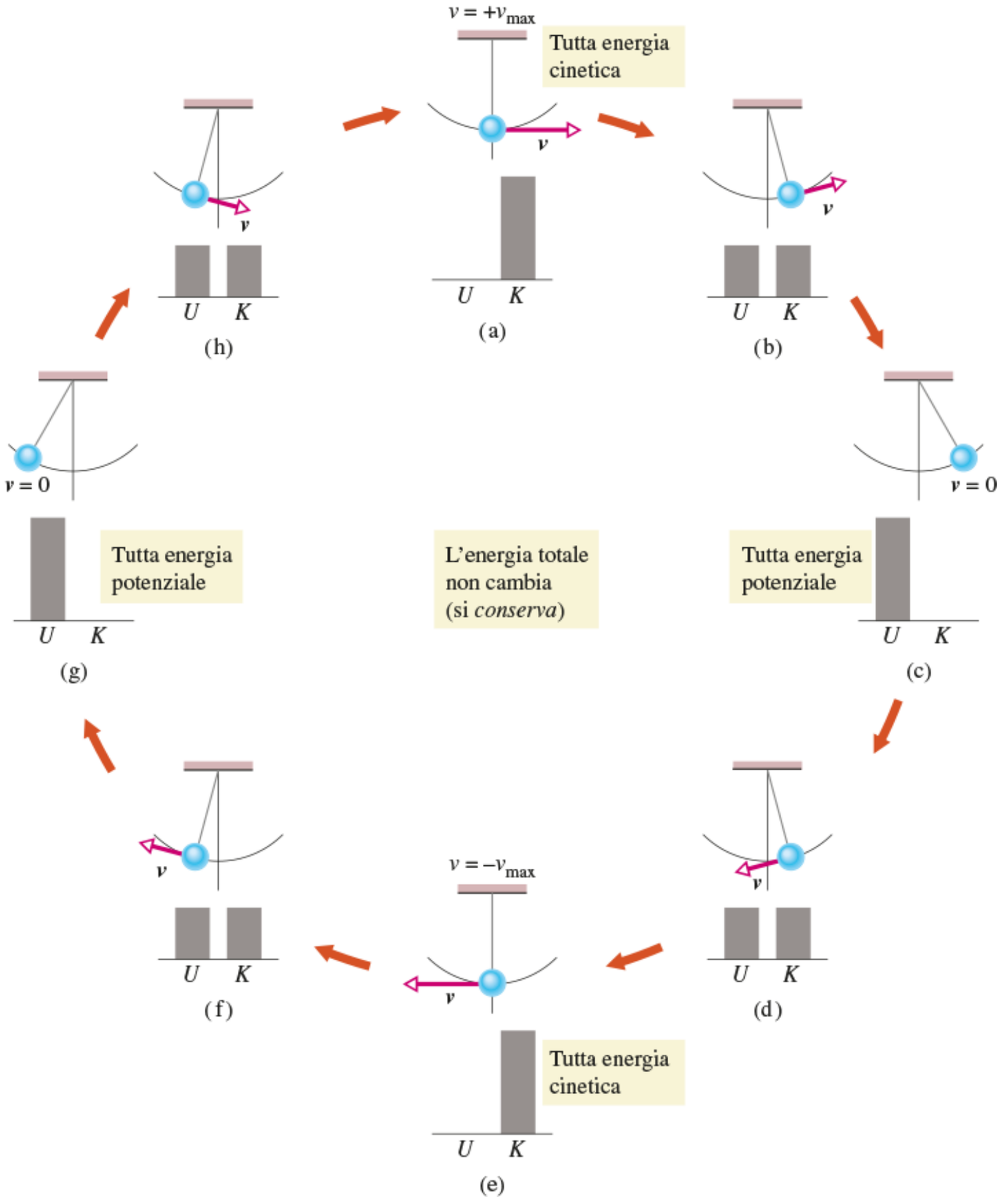




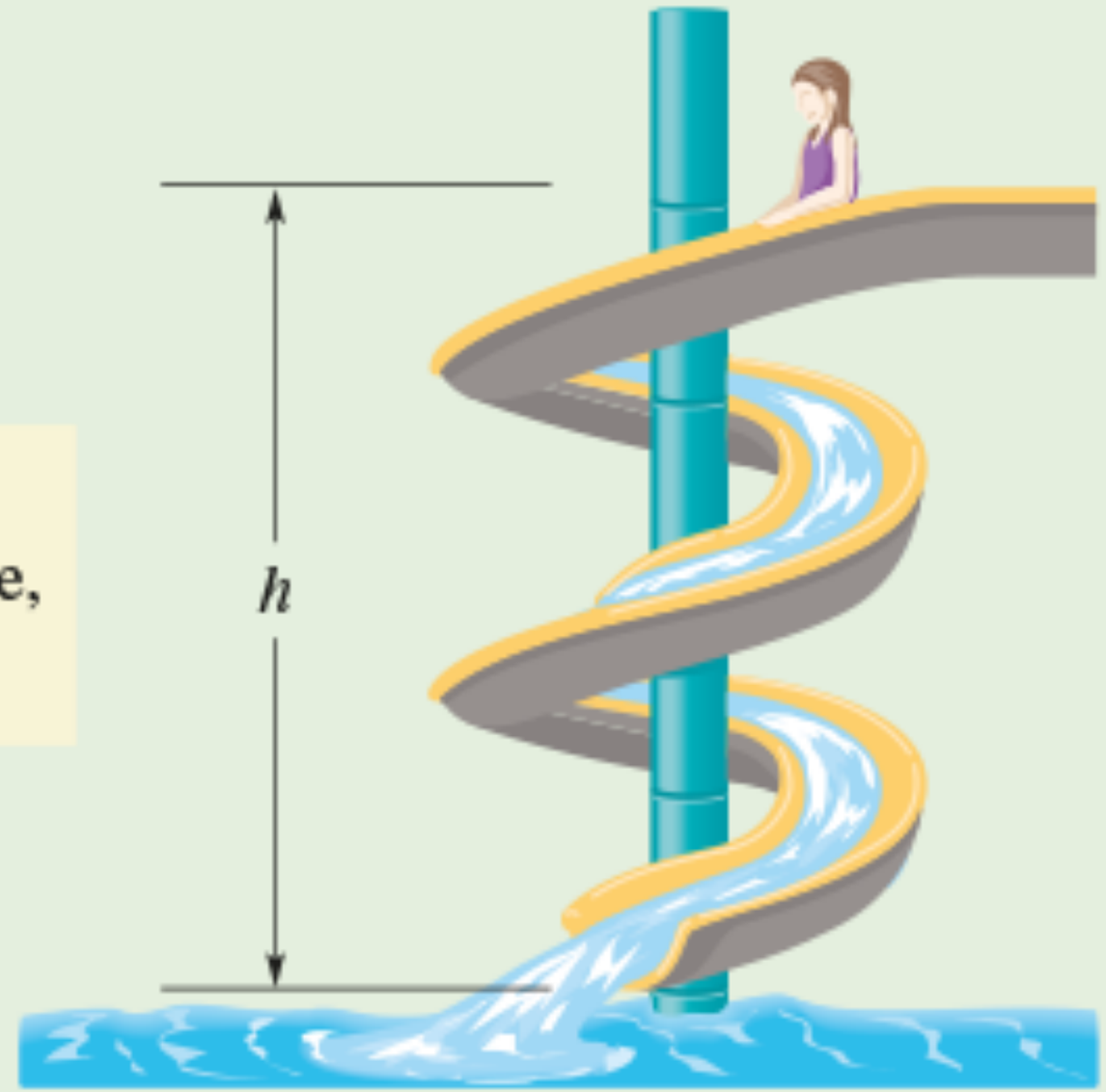


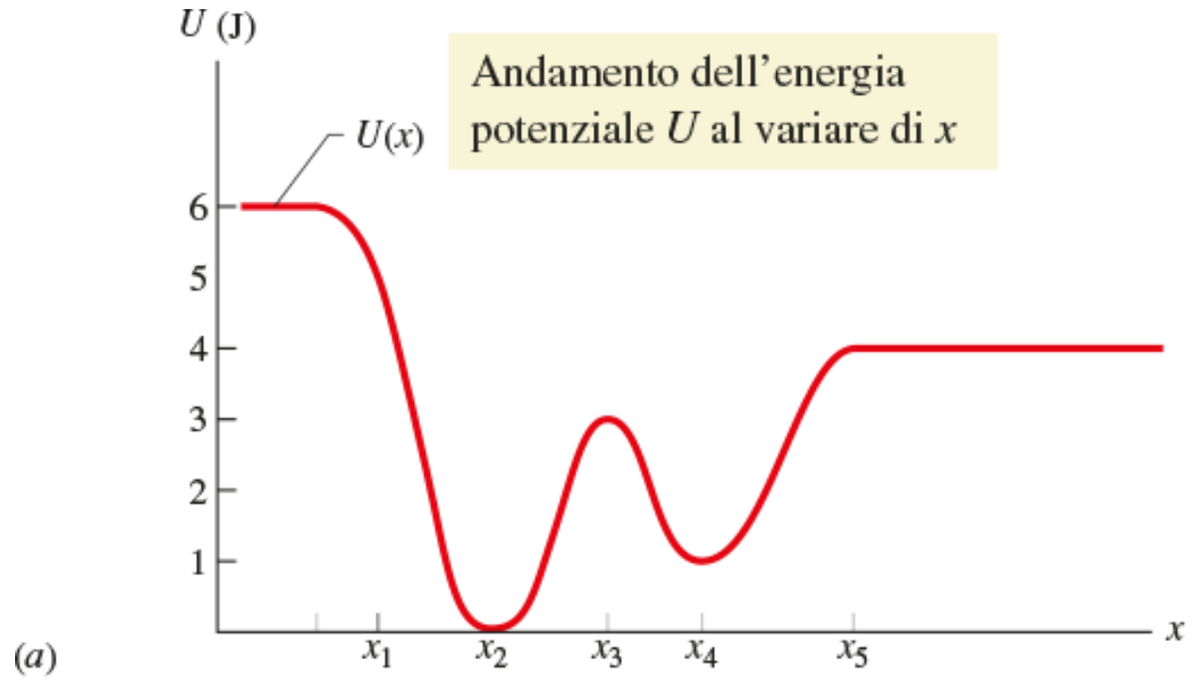
©AP/Wide World Photos





L'energia meccanica totale è sempre uguale, in cima e in fondo





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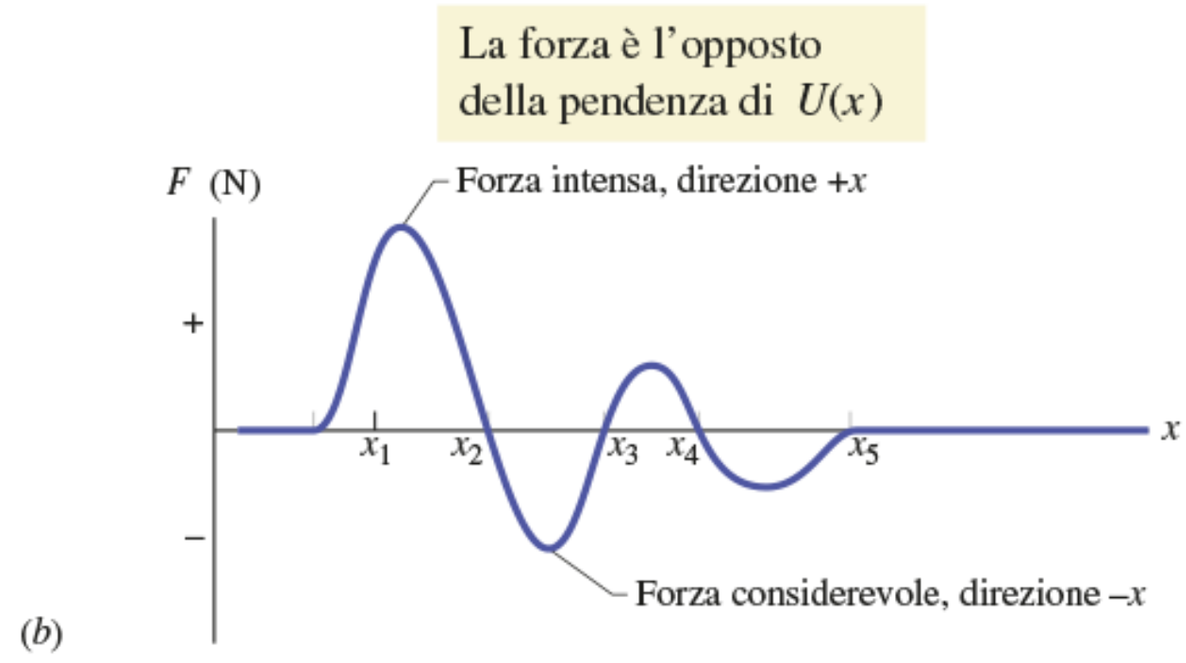

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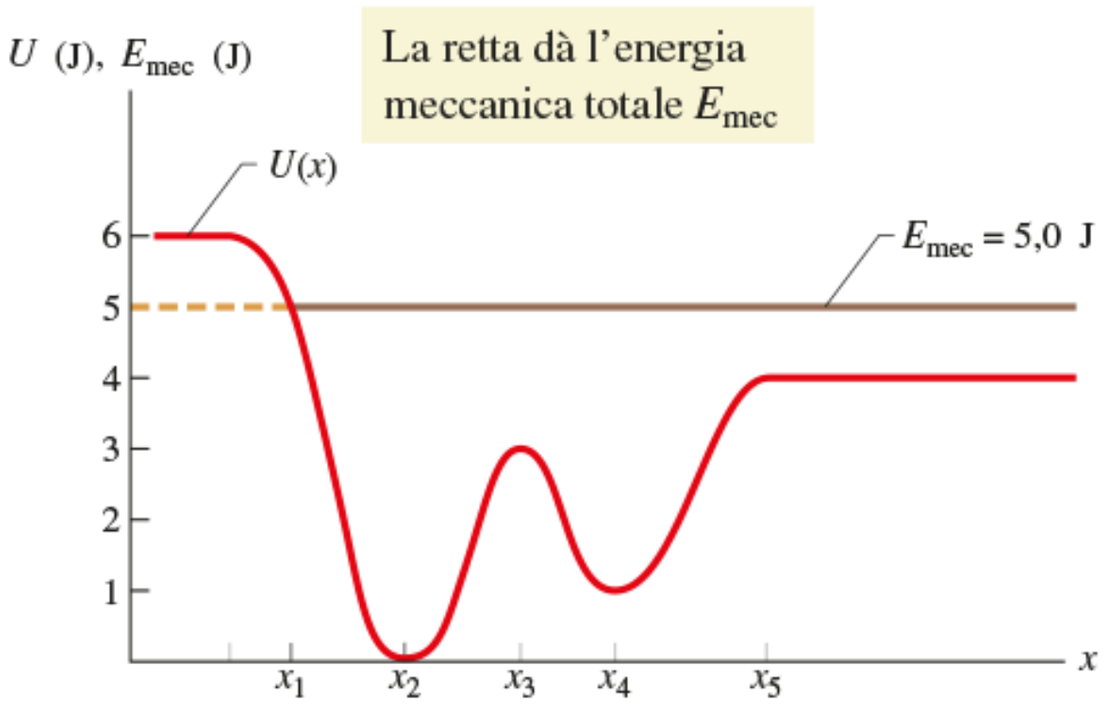

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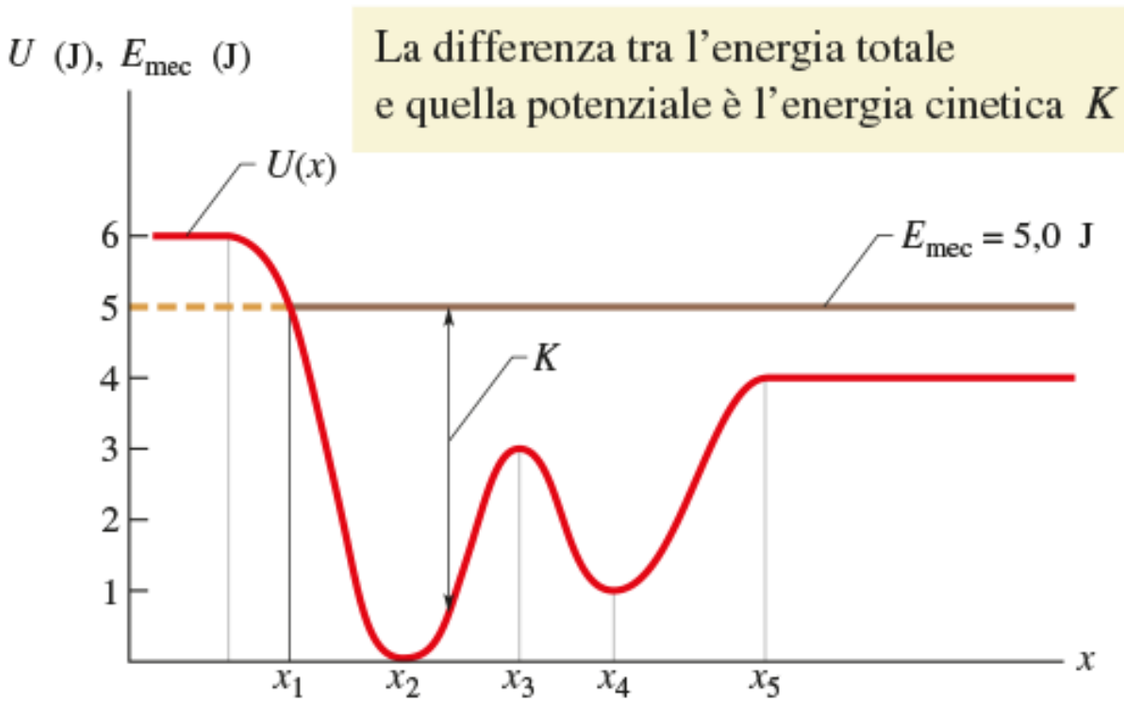

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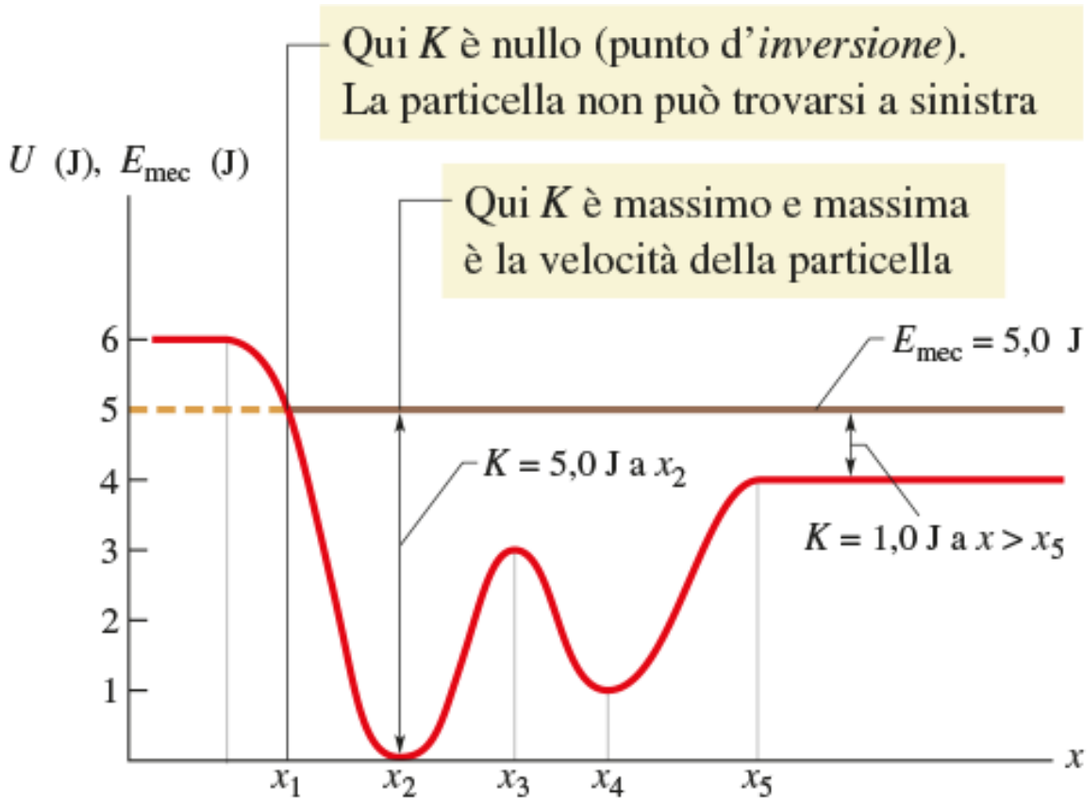

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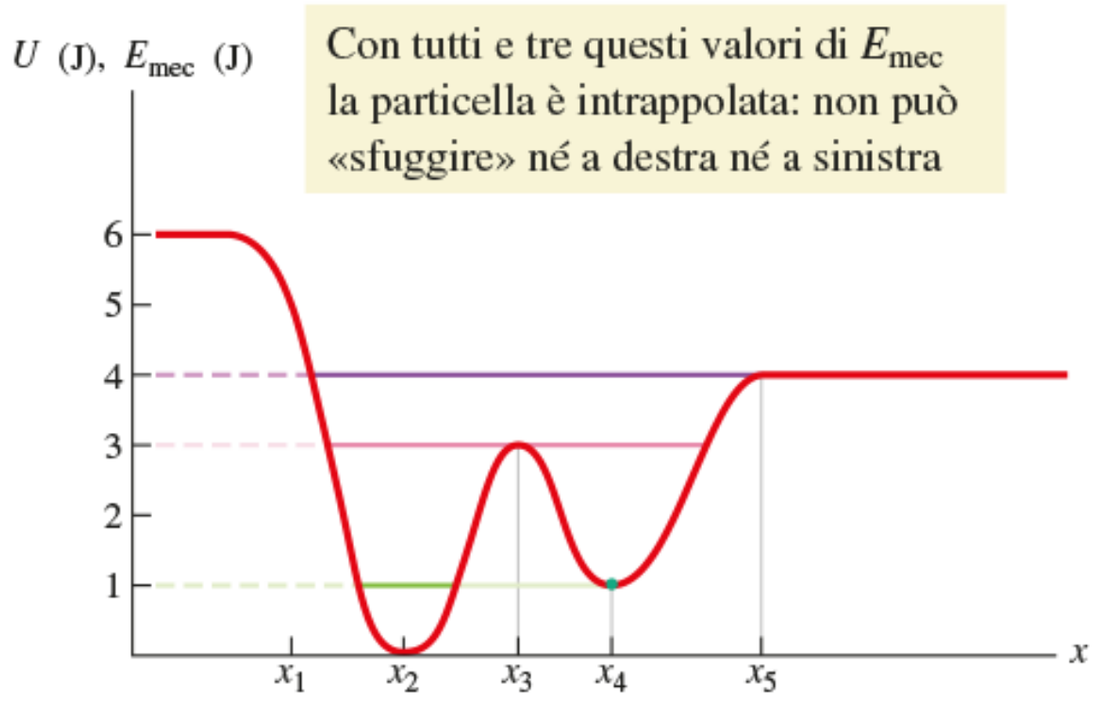

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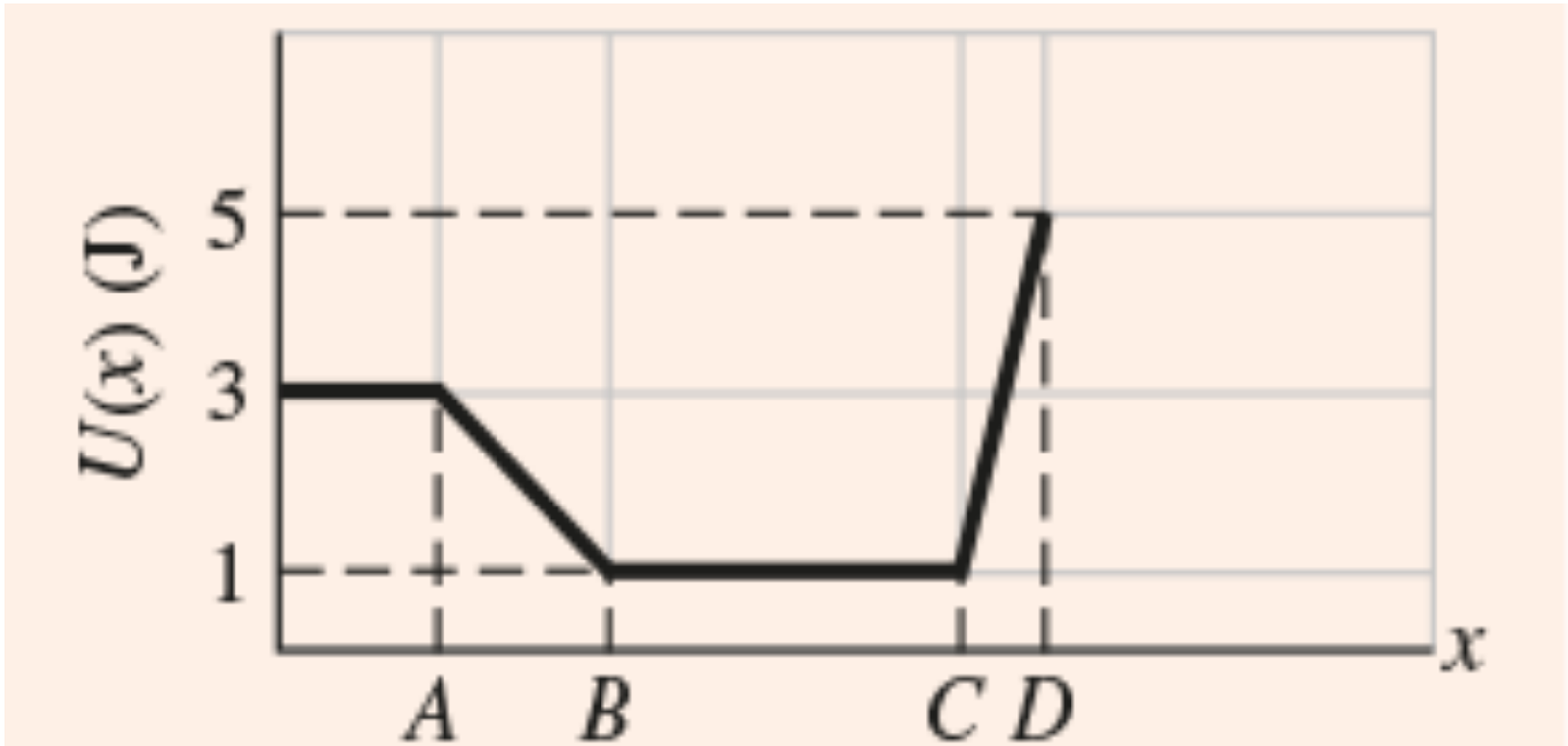
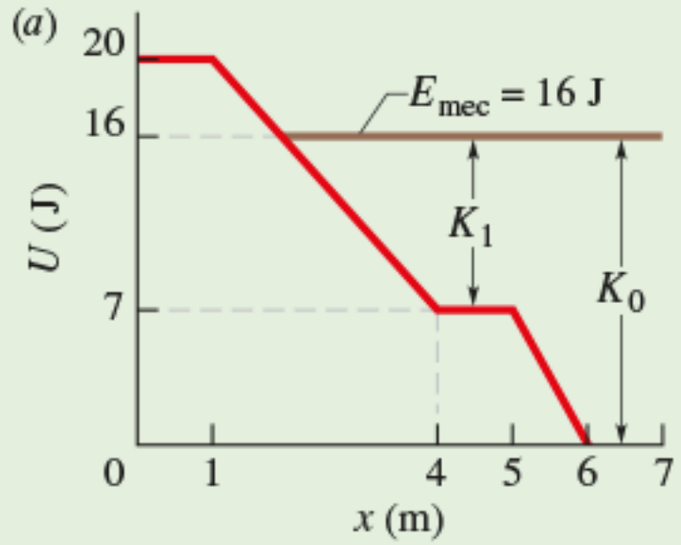
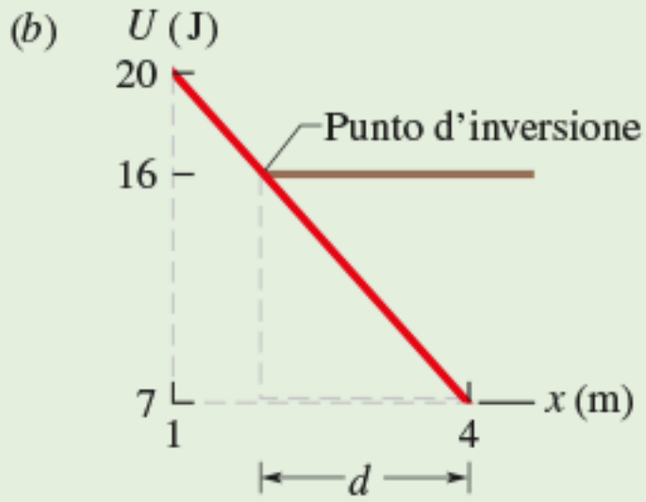
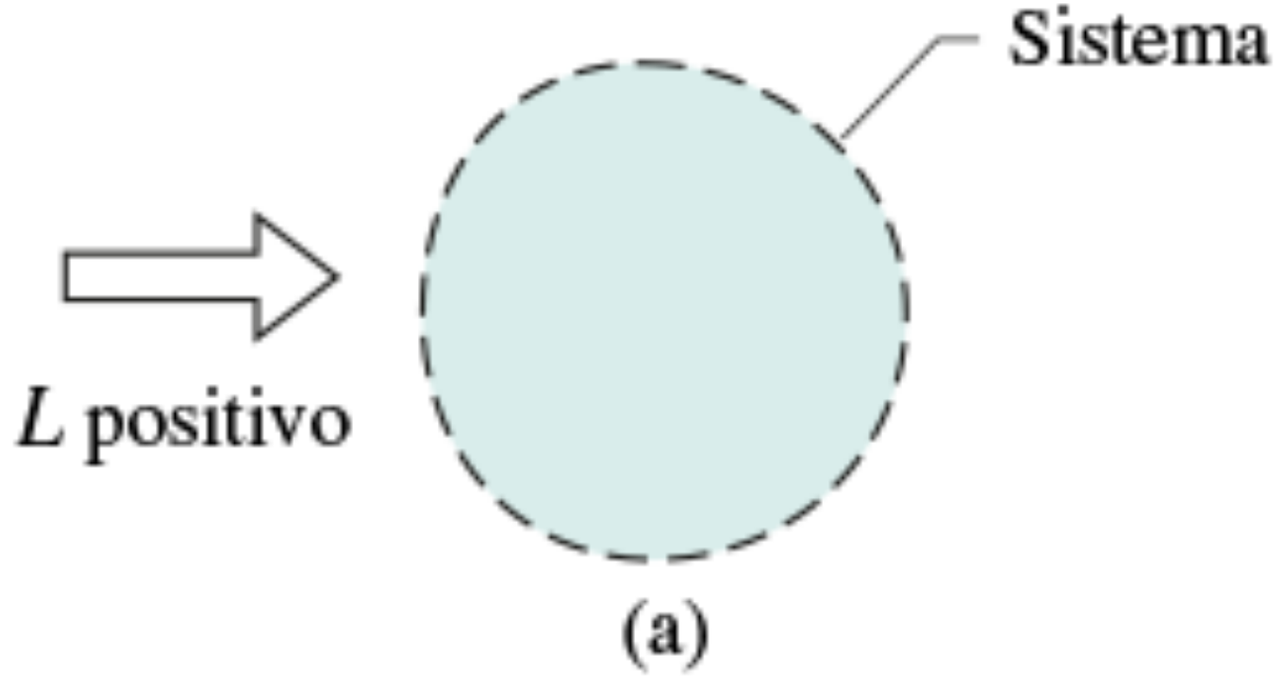


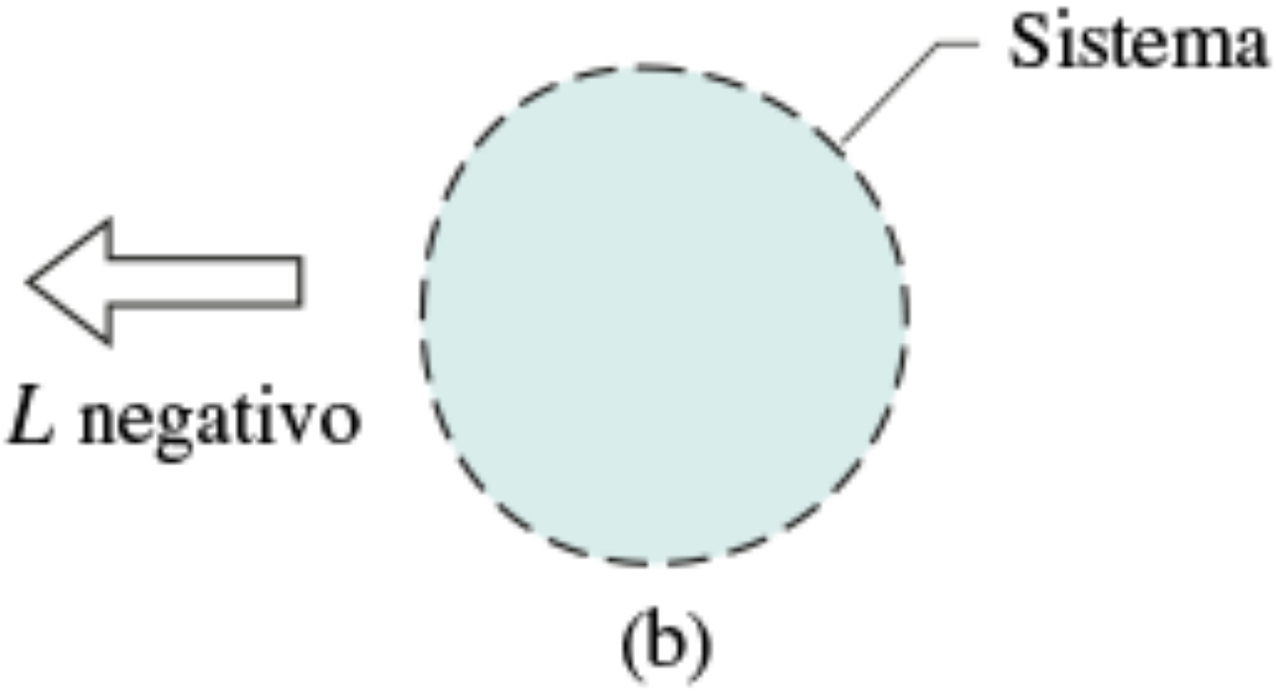


L'energia cinetica è la differenza tra l'energia totale e l'energia potenziale

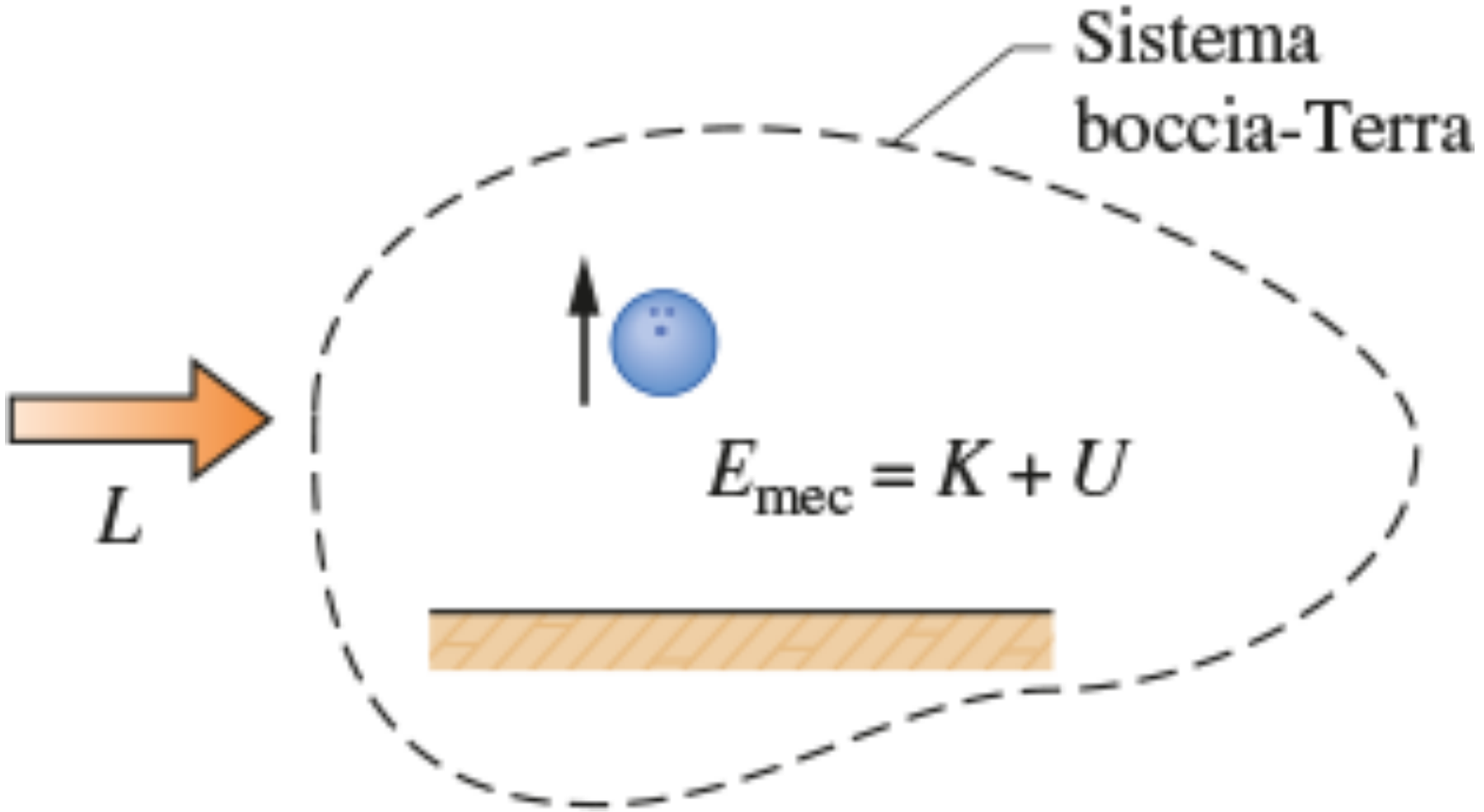


Al punto d'inversione l'energia cinetica è nulla (la particella è ferma)



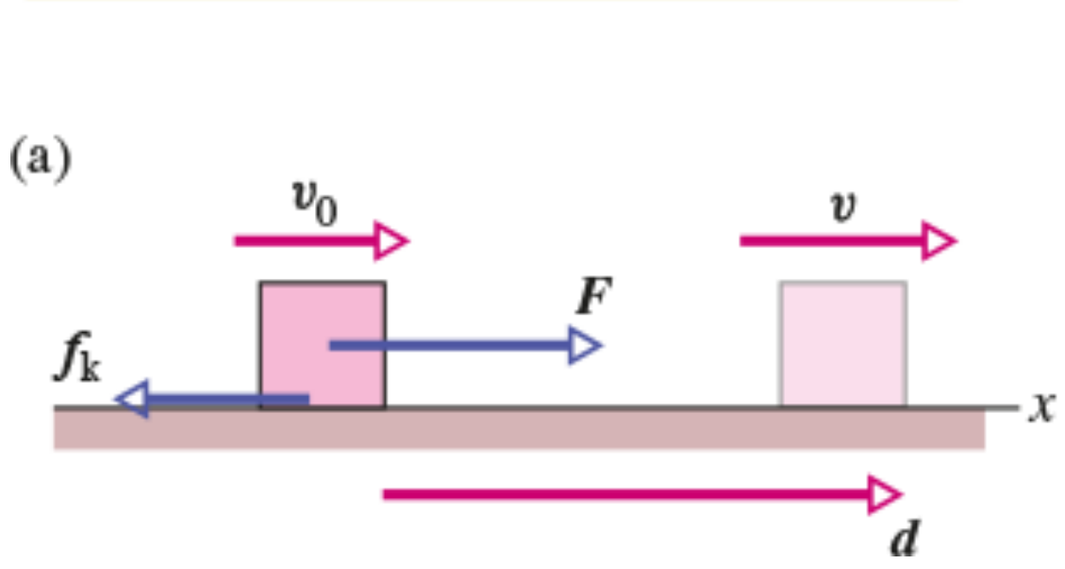


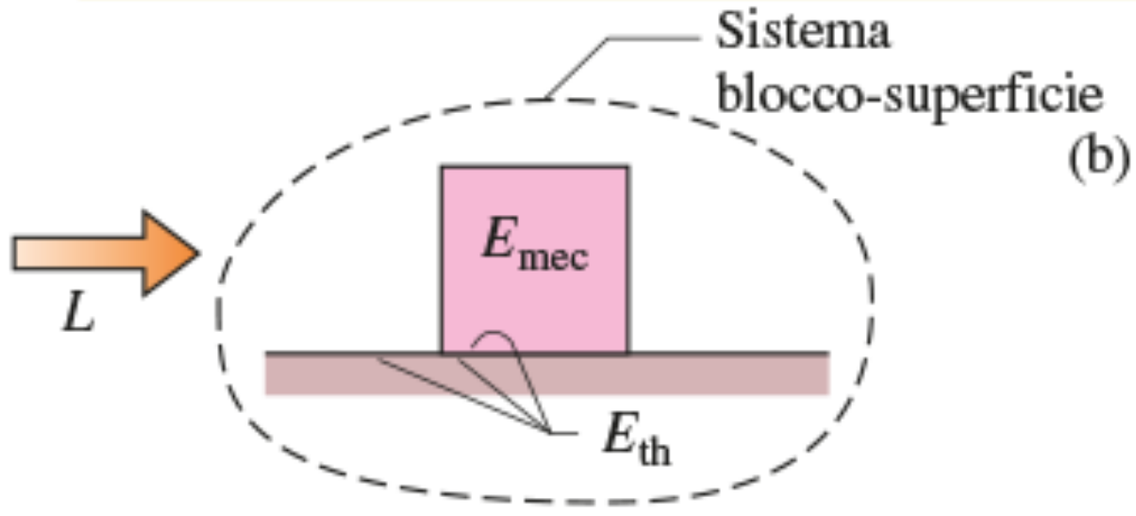
La forza di sollevamento conferisce energia cinetica ed energia potenziale



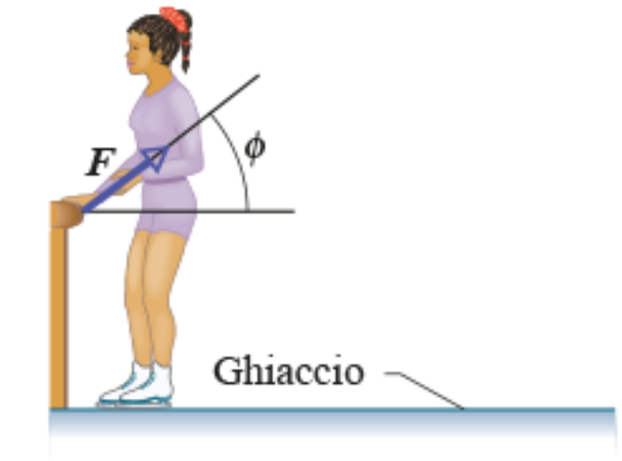
La forza applicata fornisce energia.
La forza d'attrito ne converte una parte in energia termica

Dunque il lavoro svolto dalla forza applicata finisce parte in energia cinetica, parte in energia termica





Tyler Stableford/The Image Bank/Getty Images



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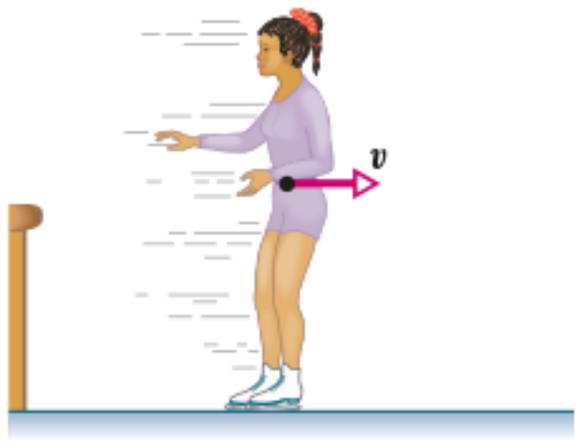
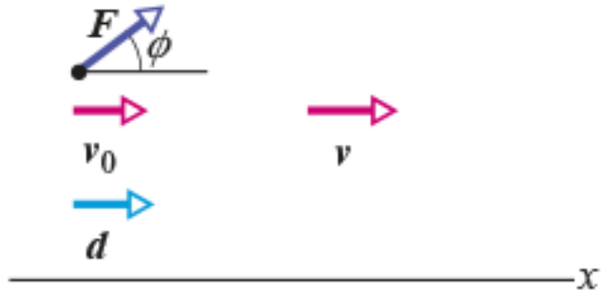


(b)

La spinta contro il parapetto trasforma energia interna in energia cinetica



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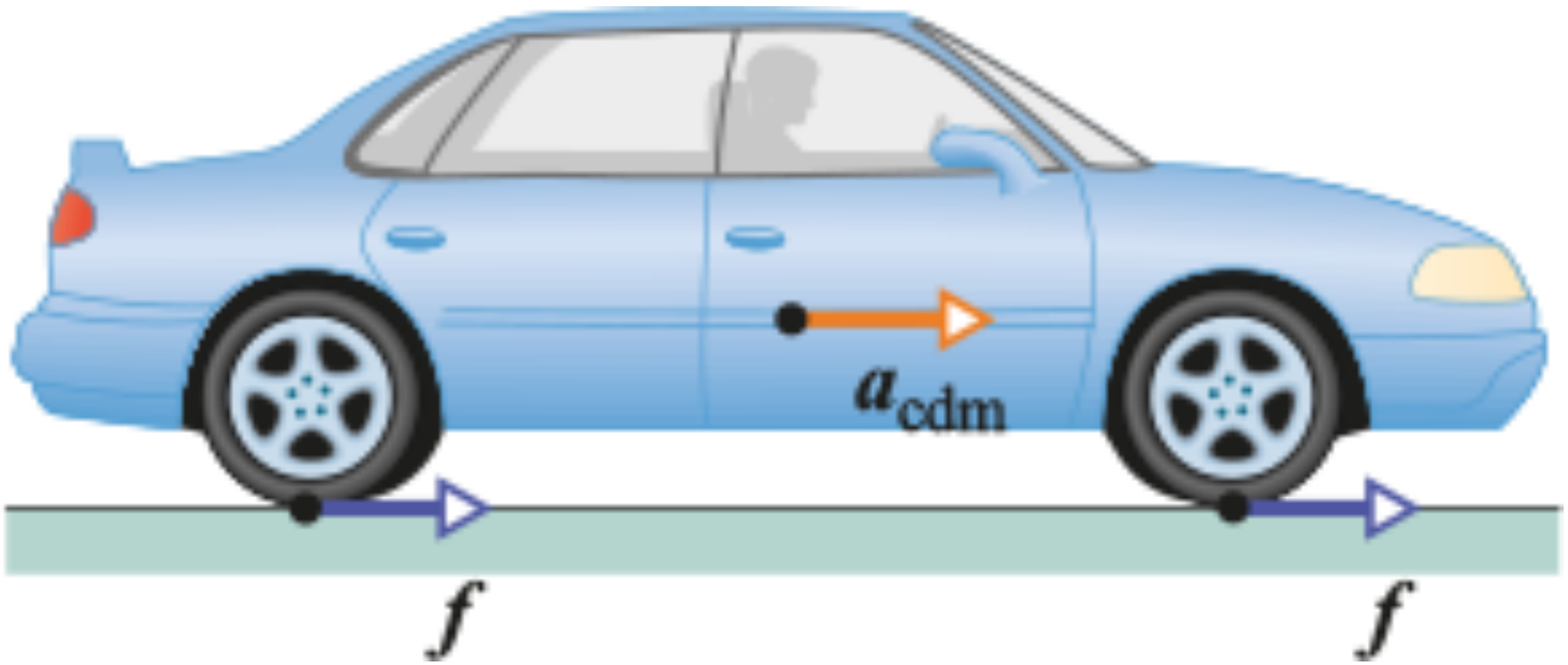

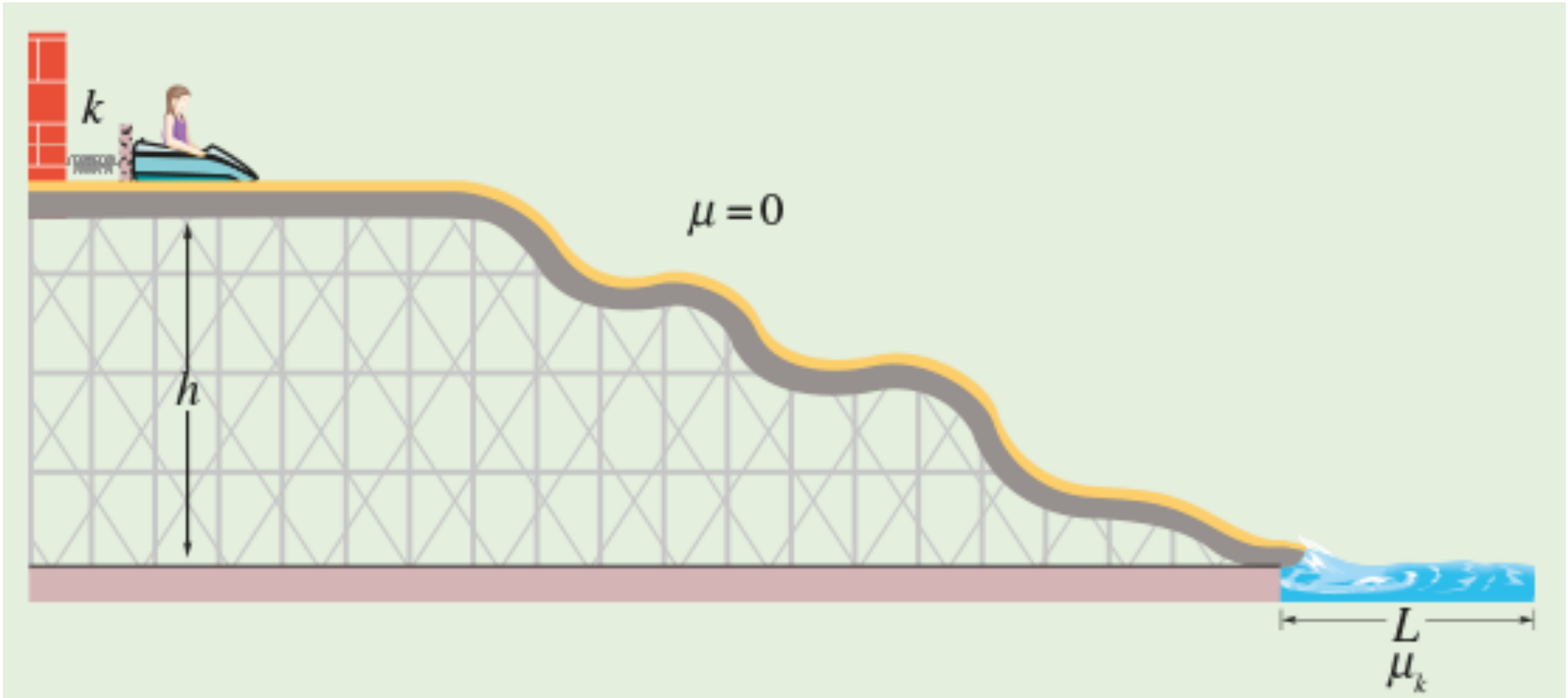

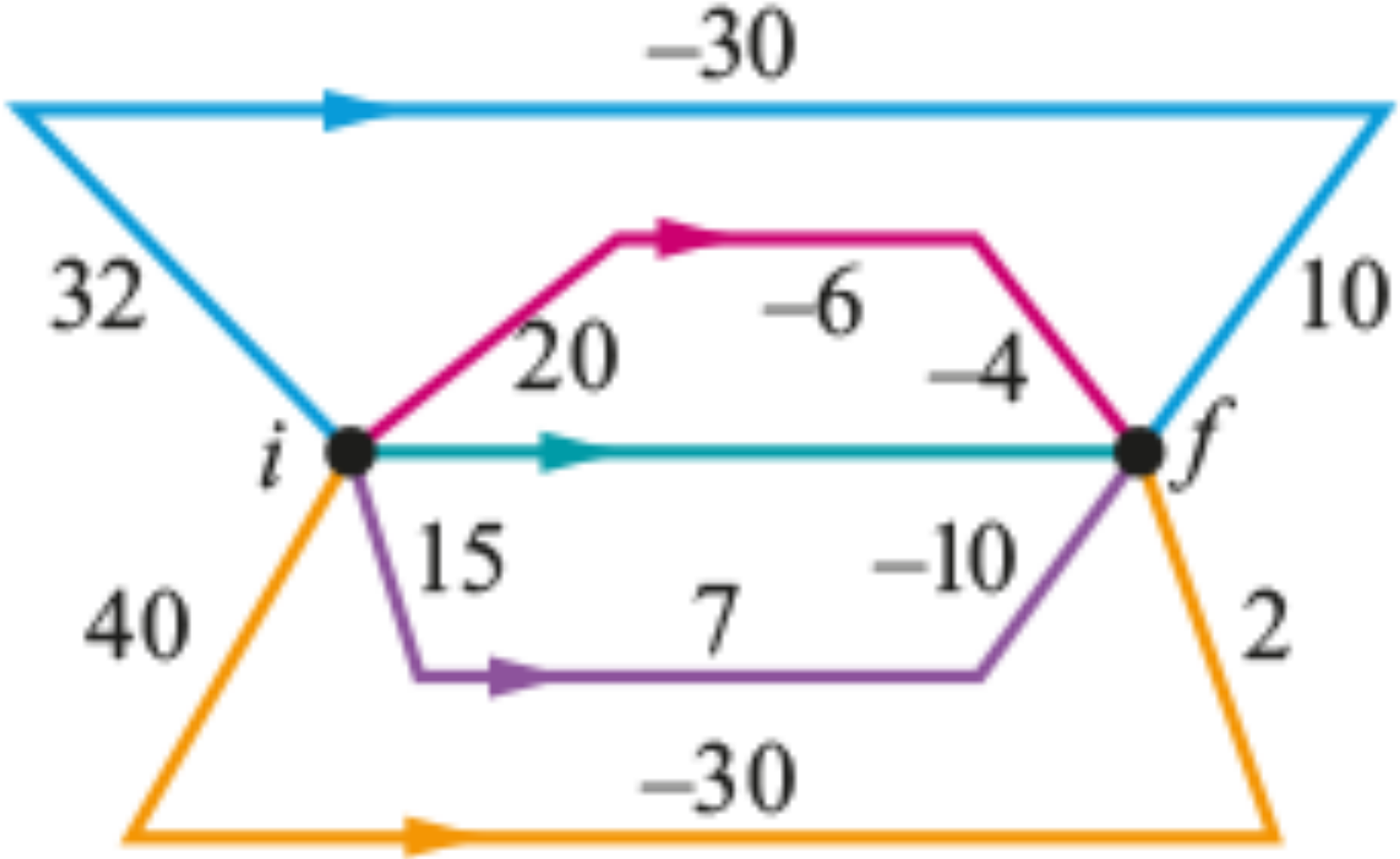

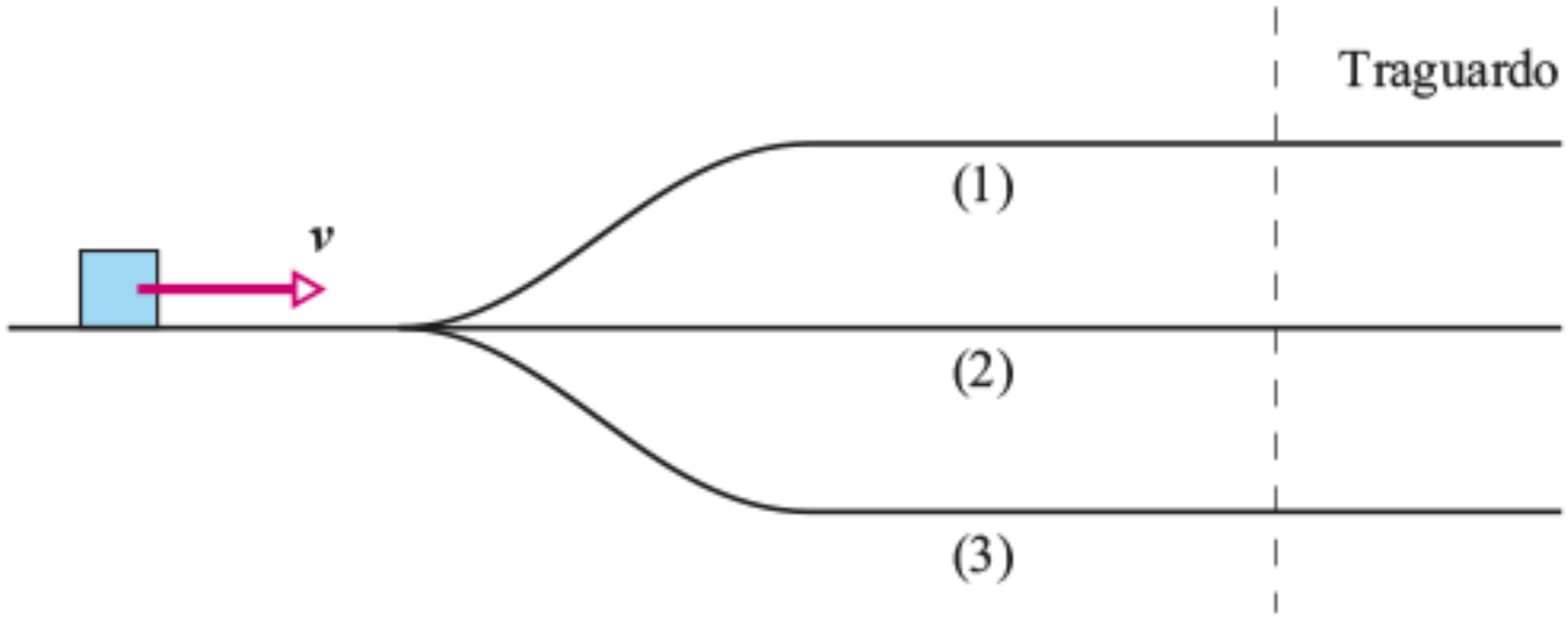

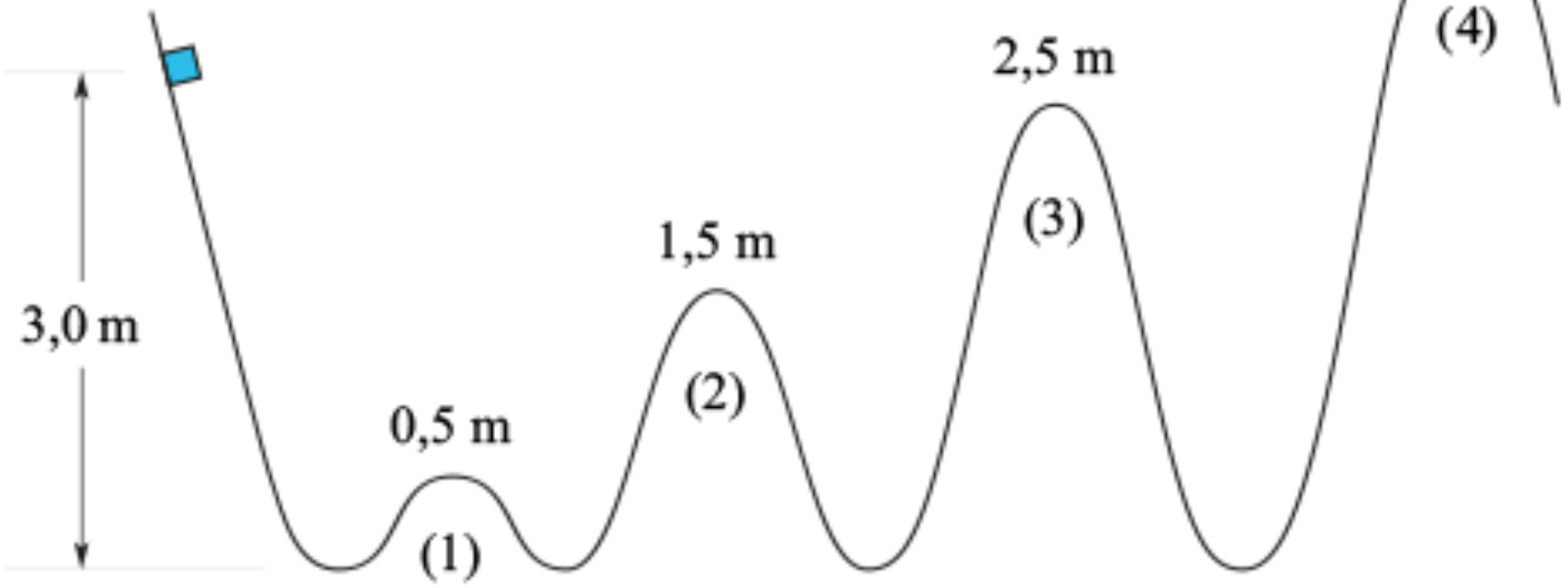

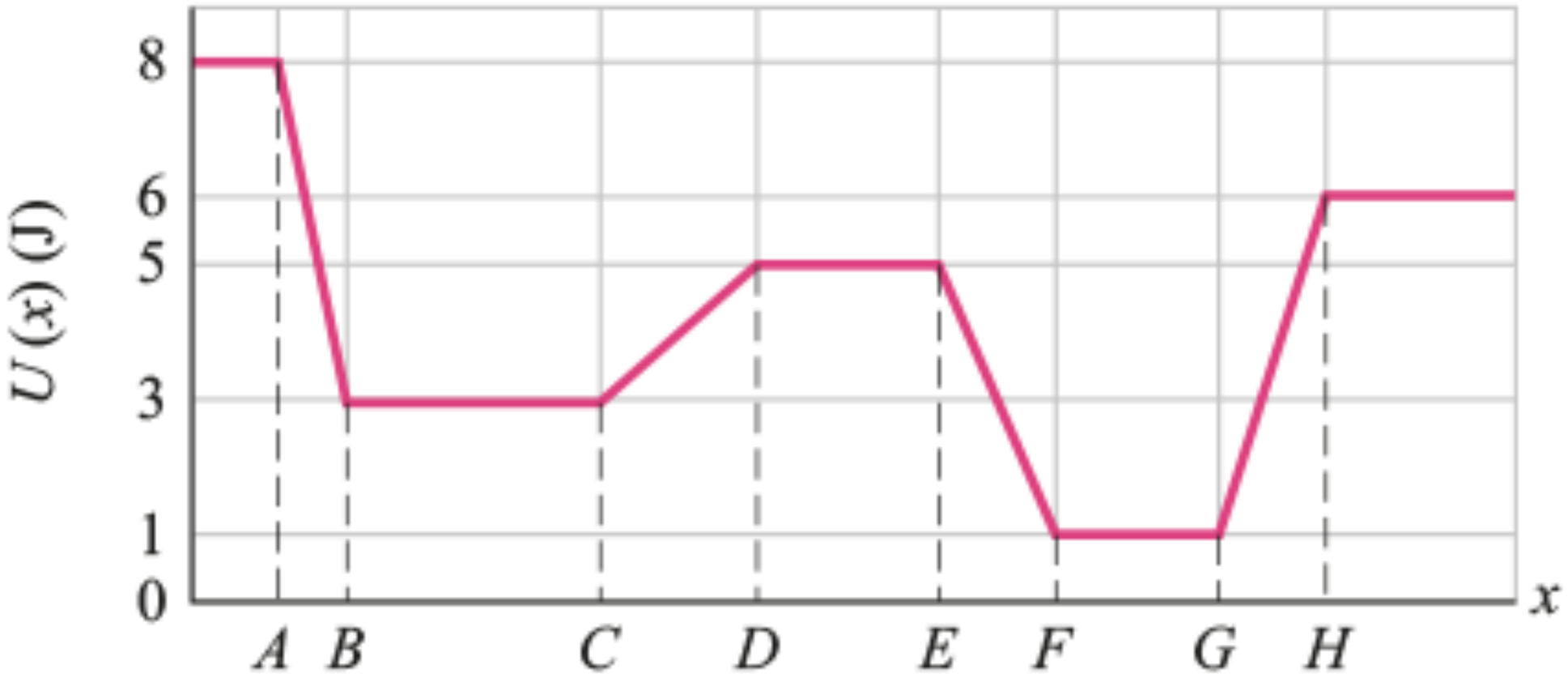

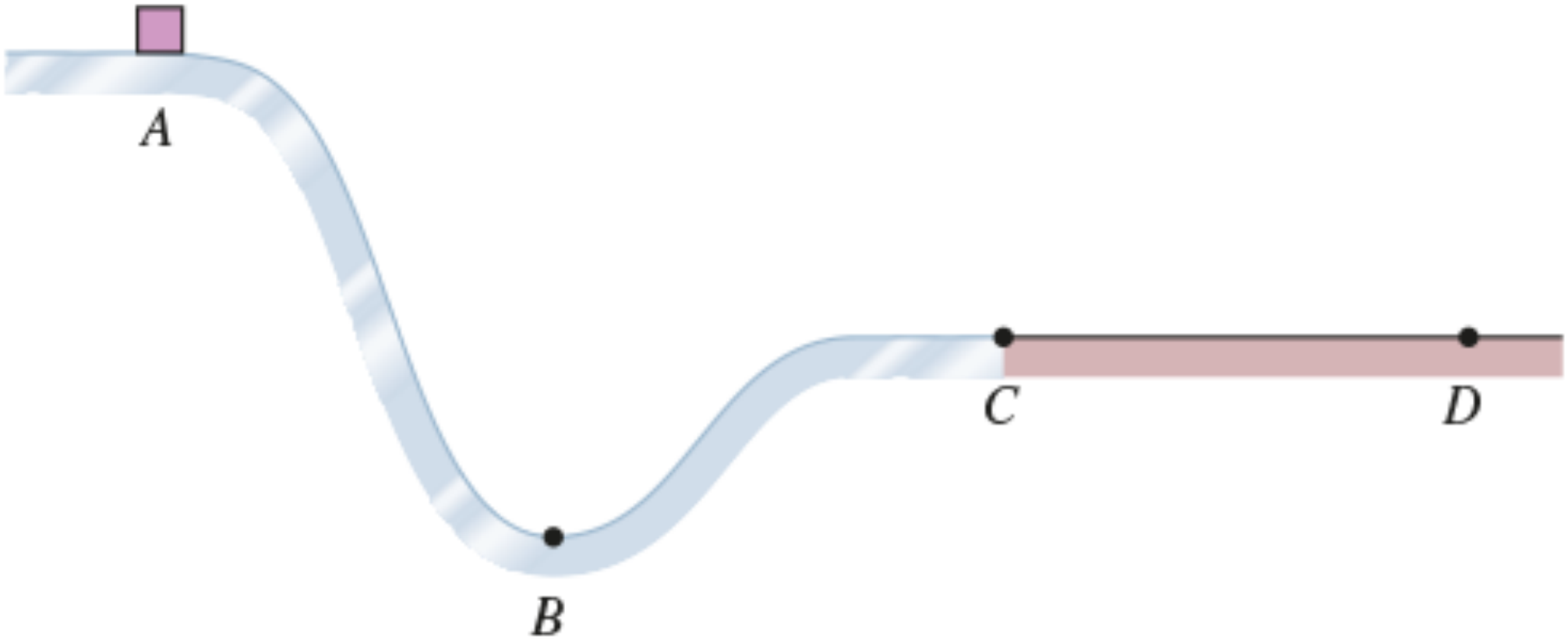

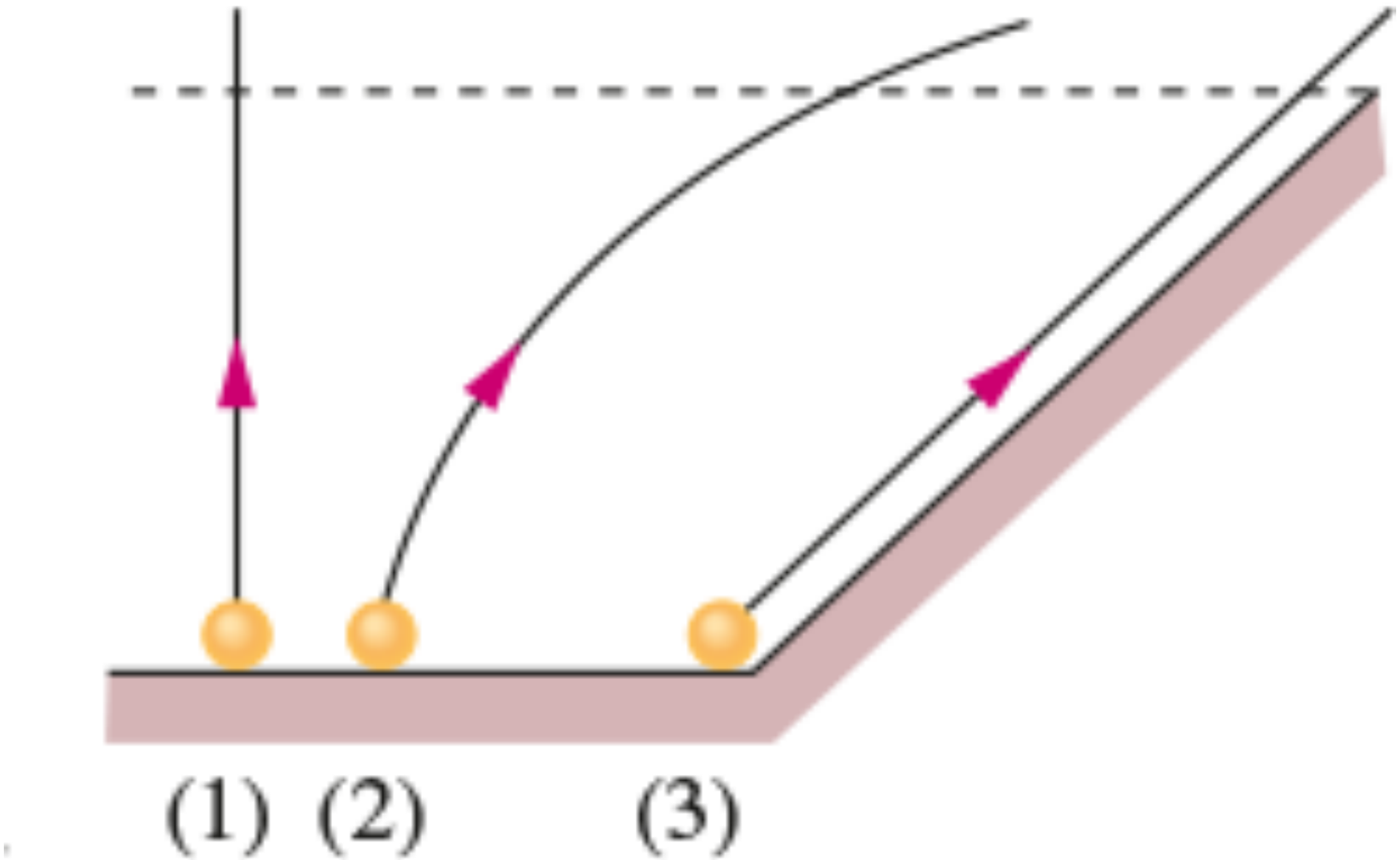

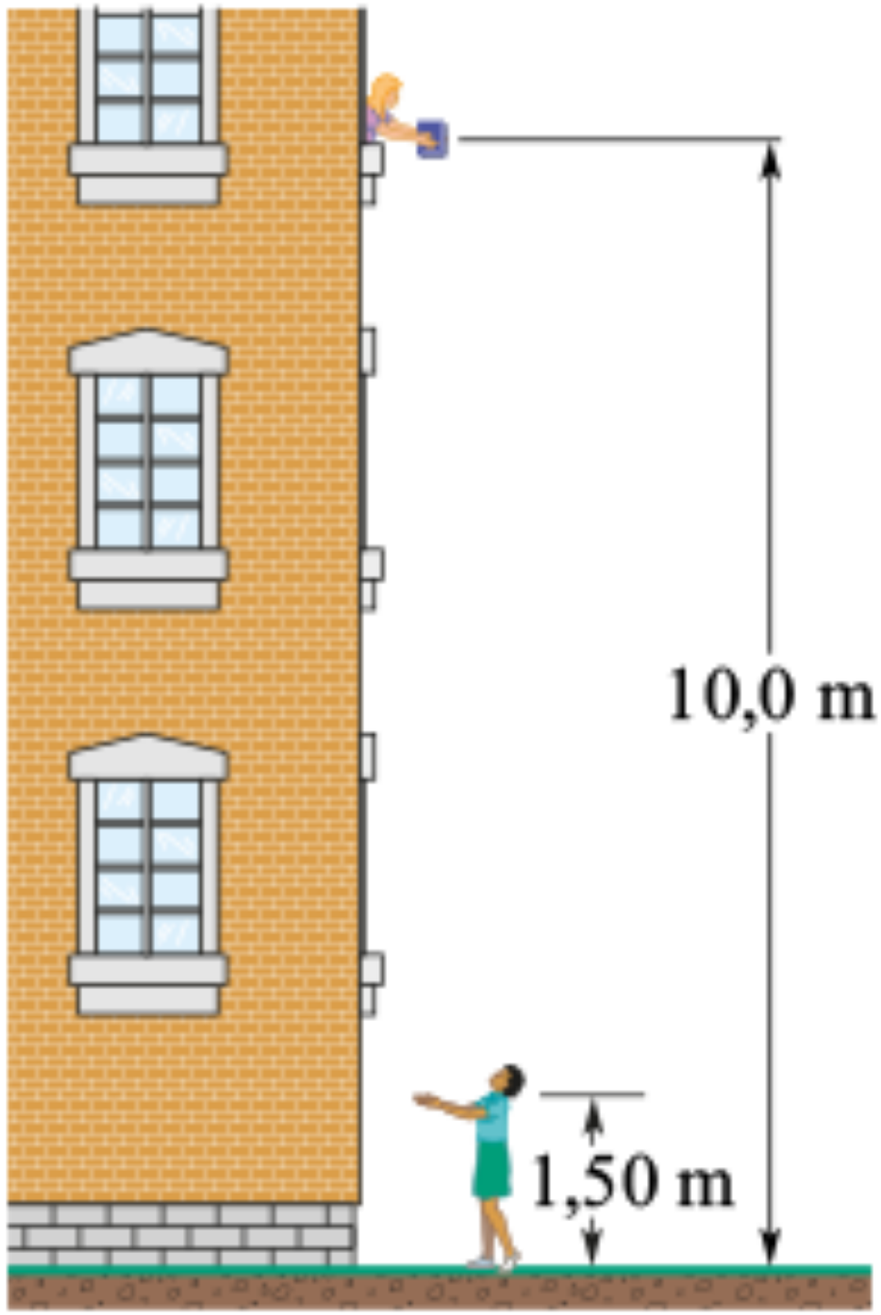

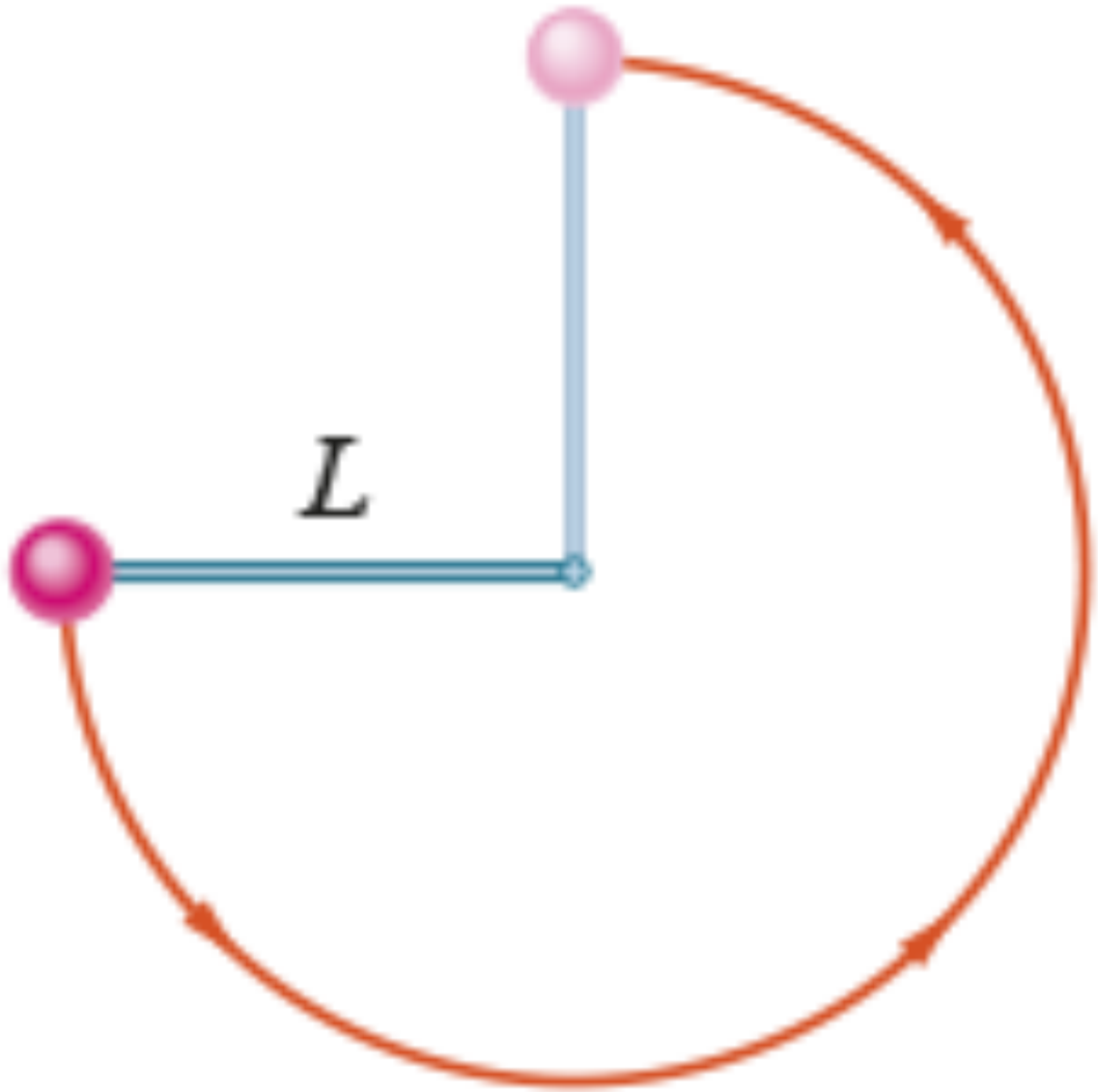

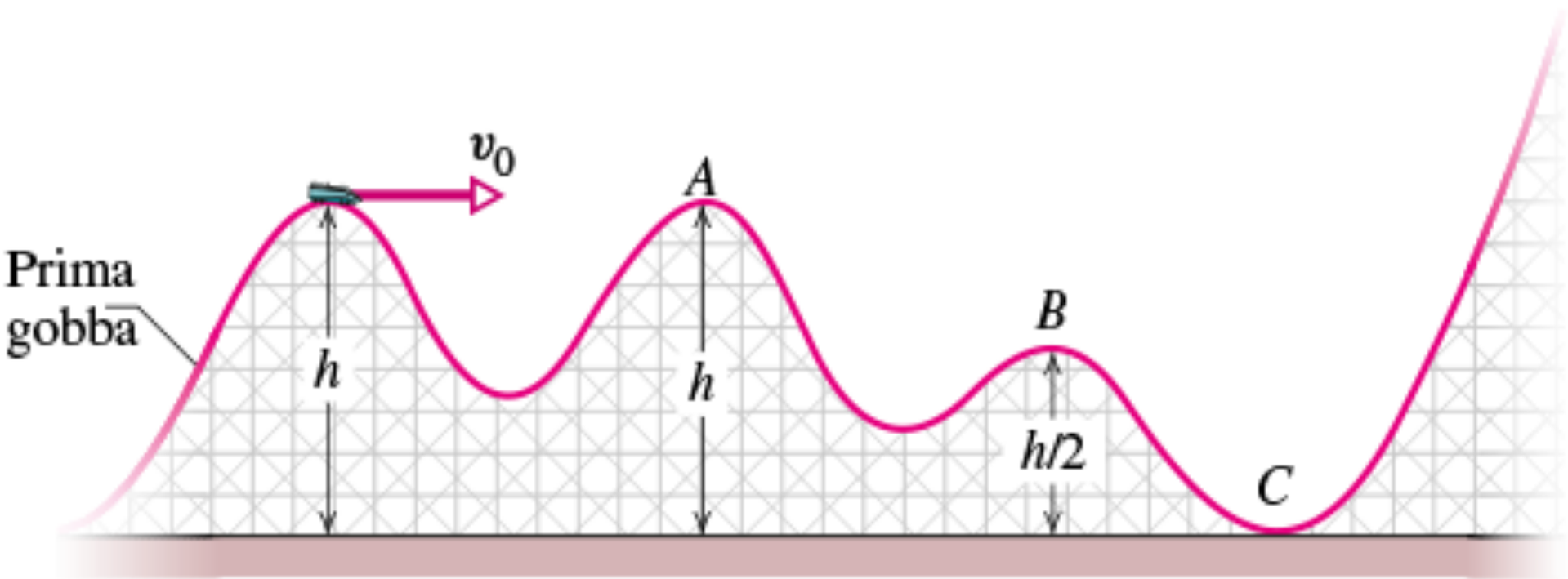

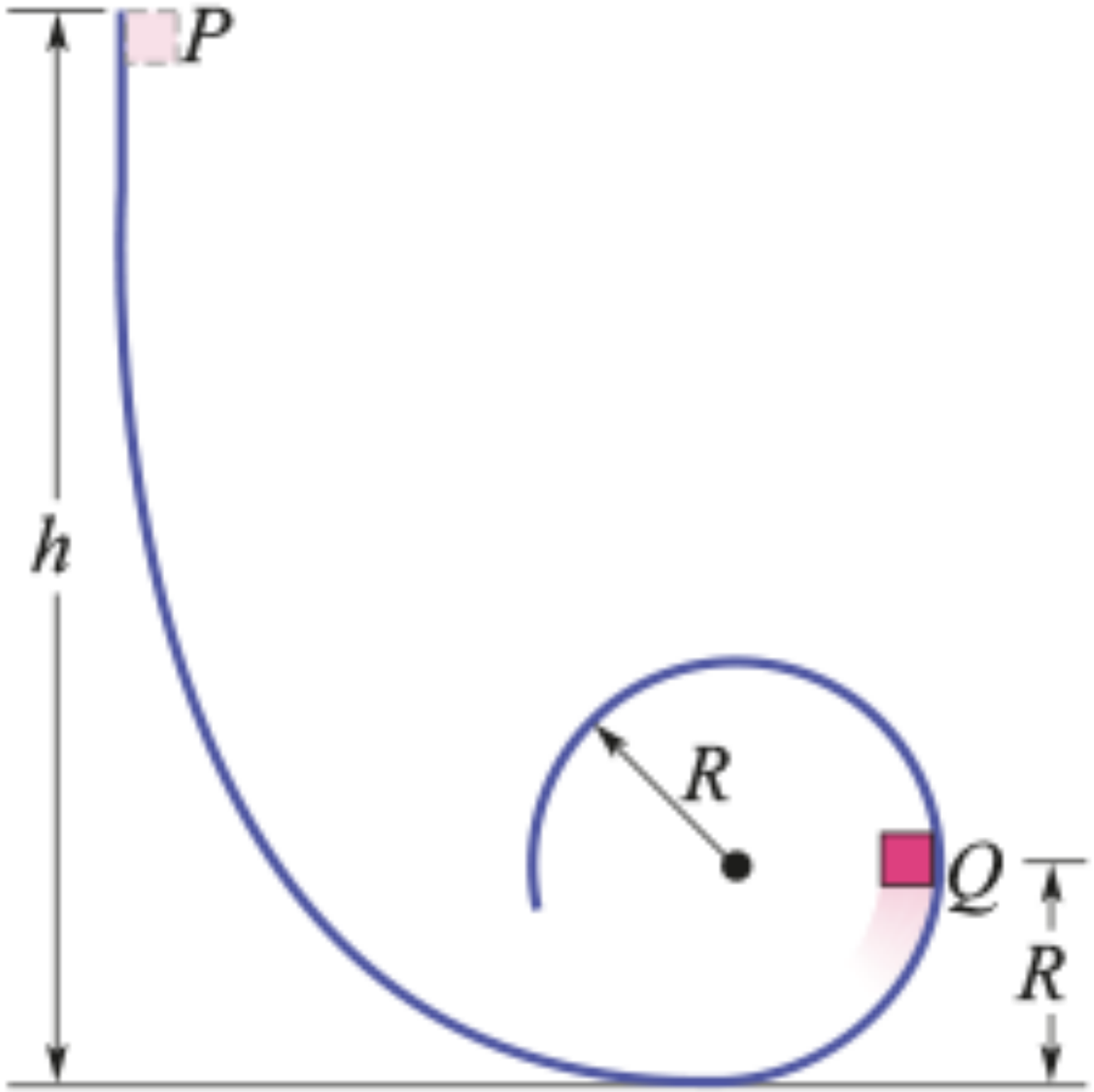

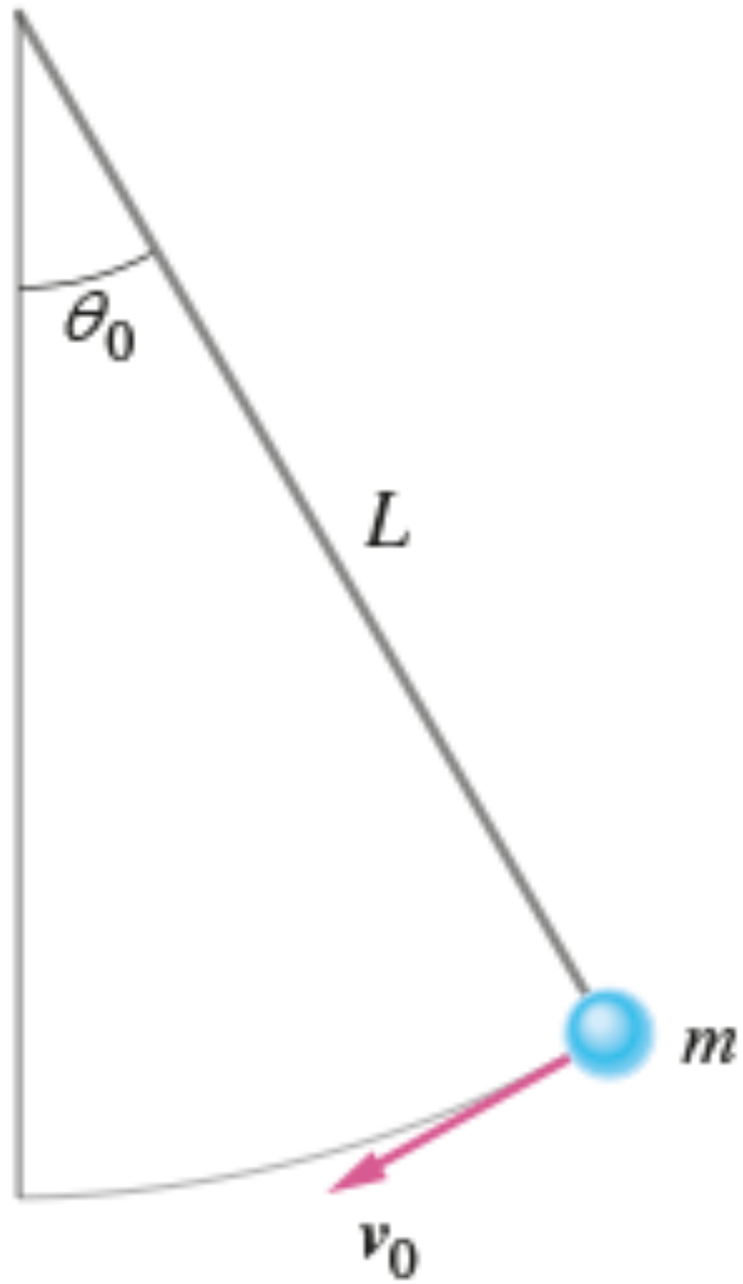

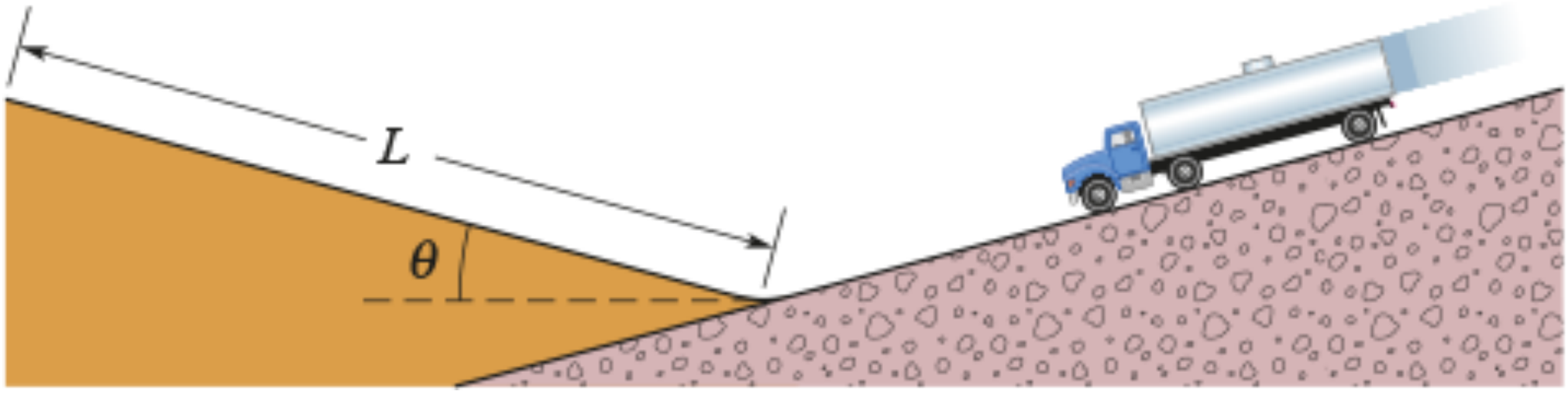

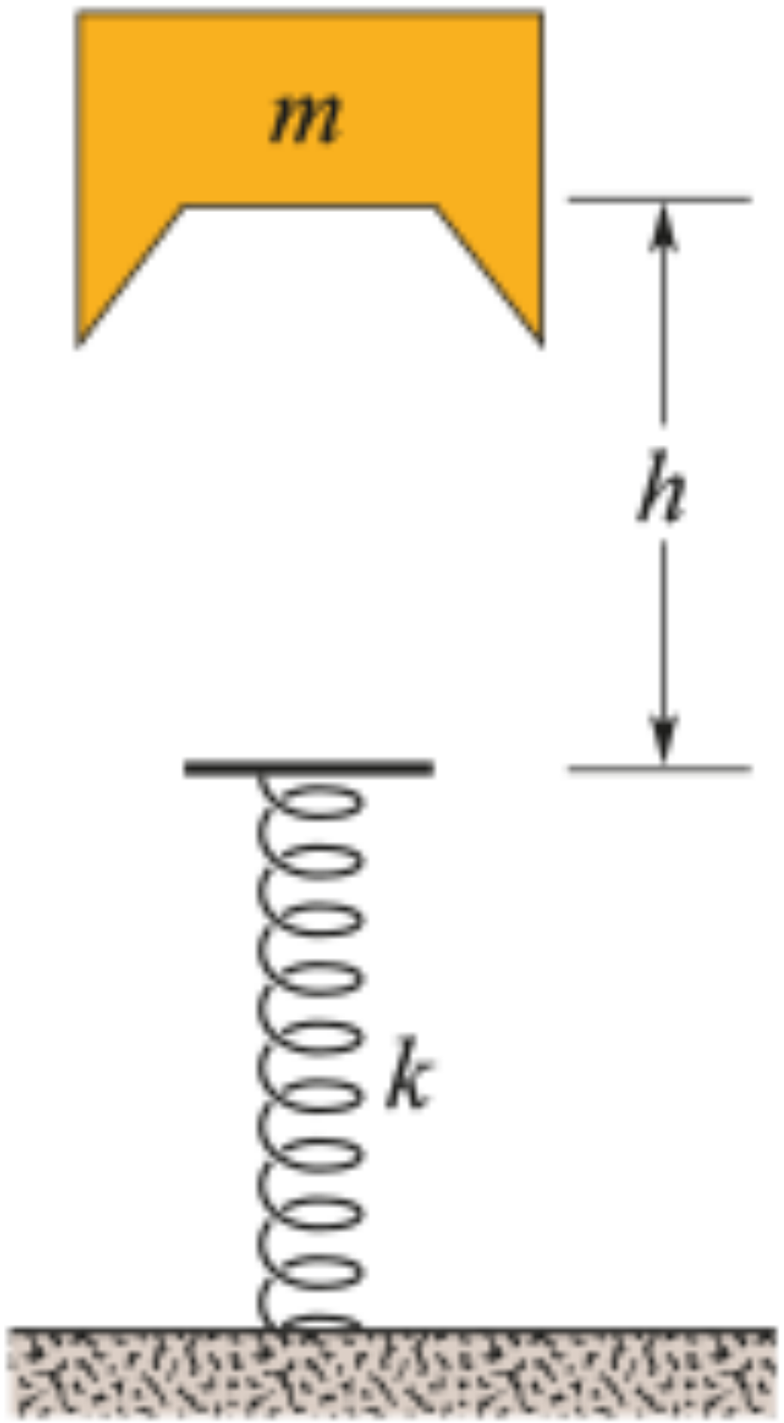

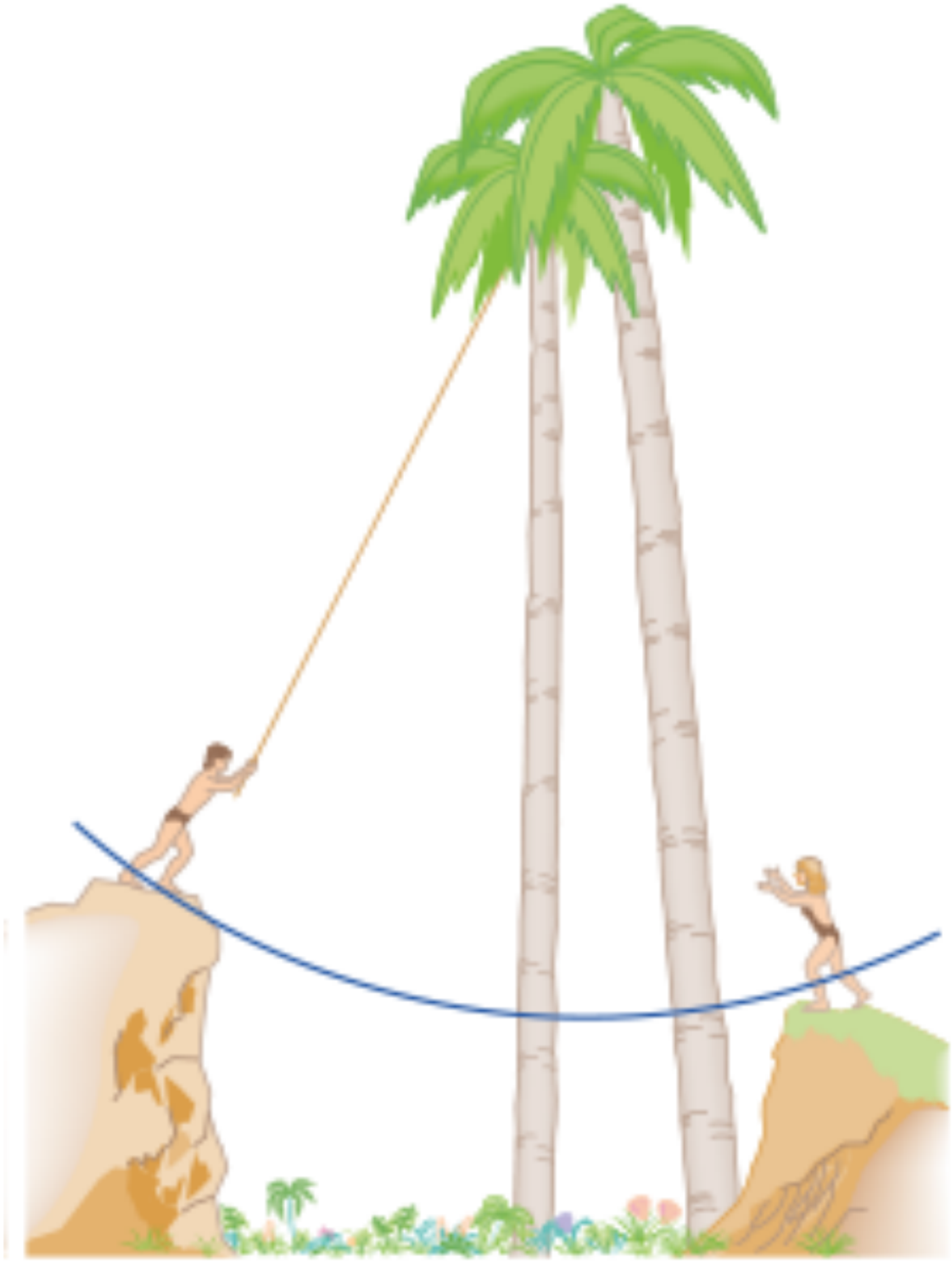

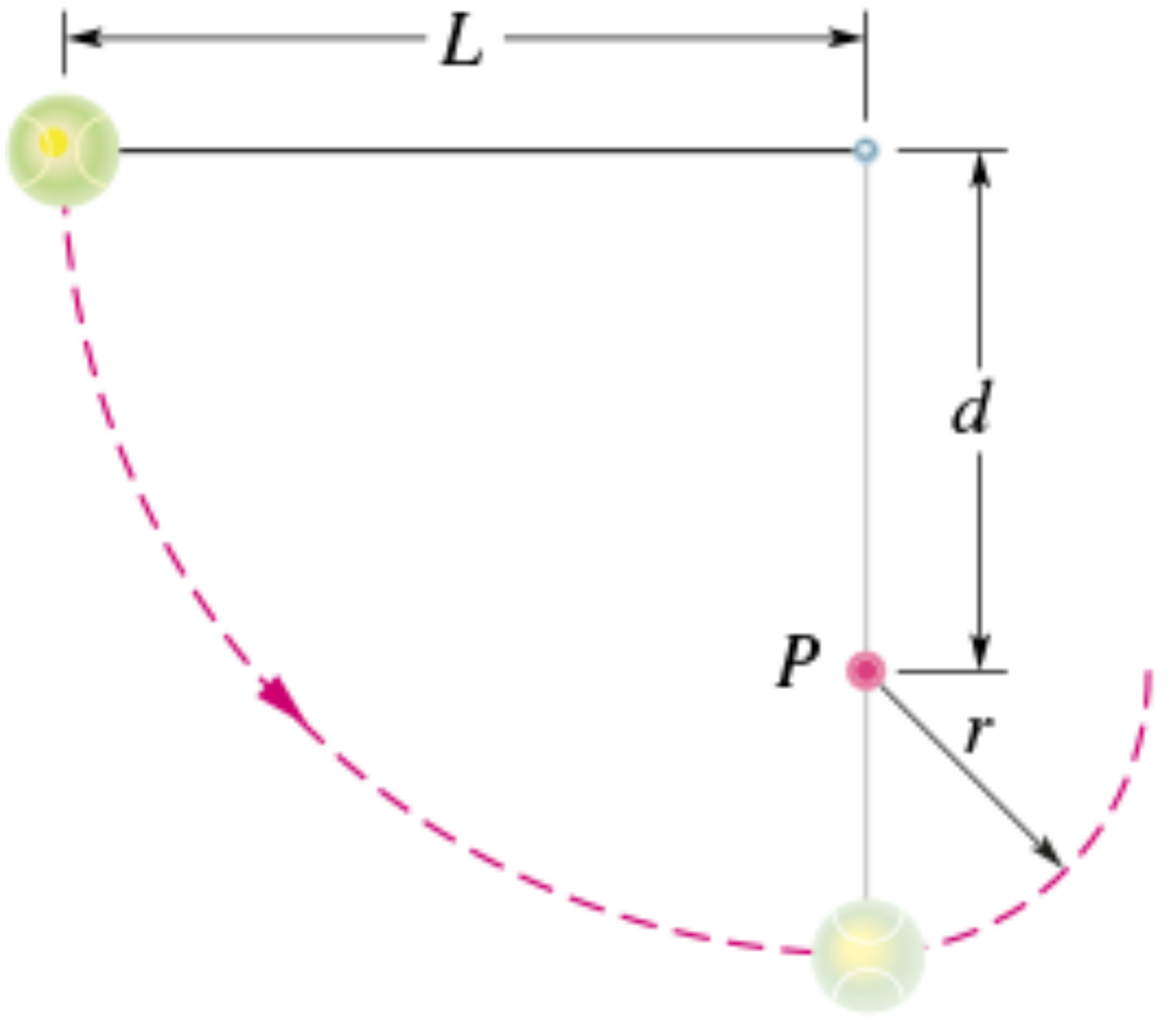

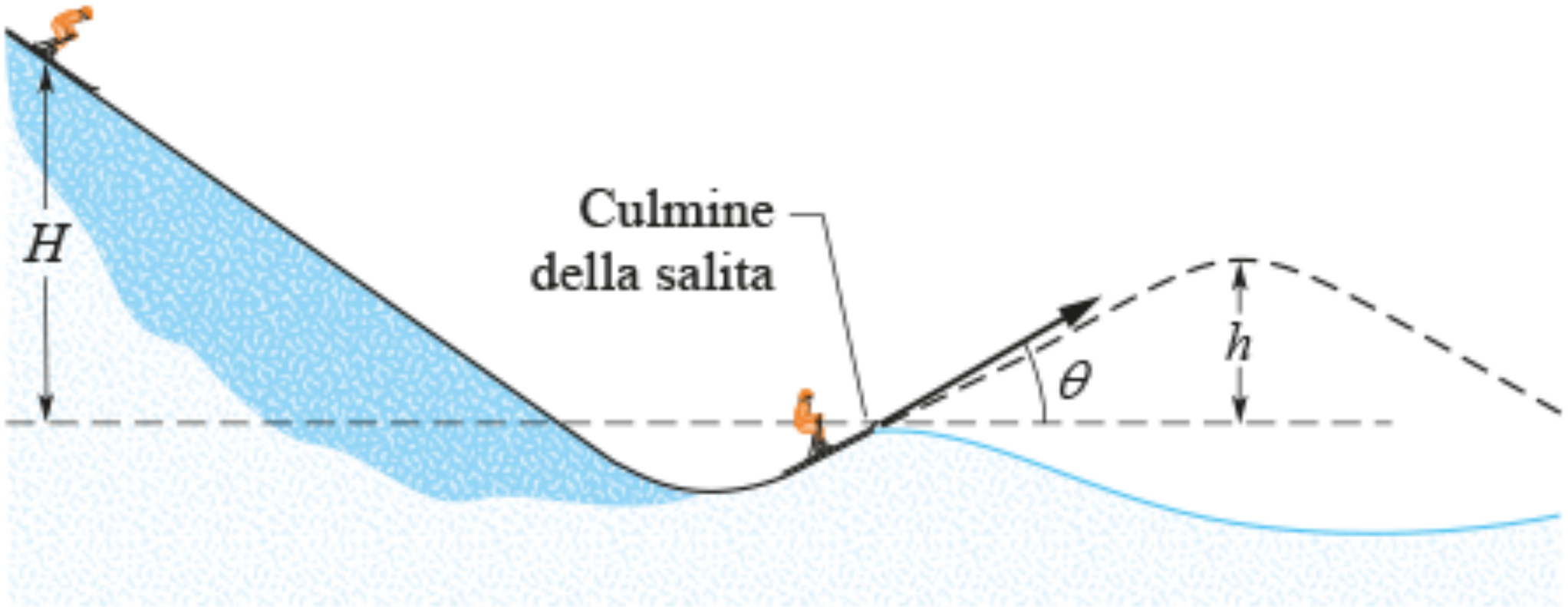

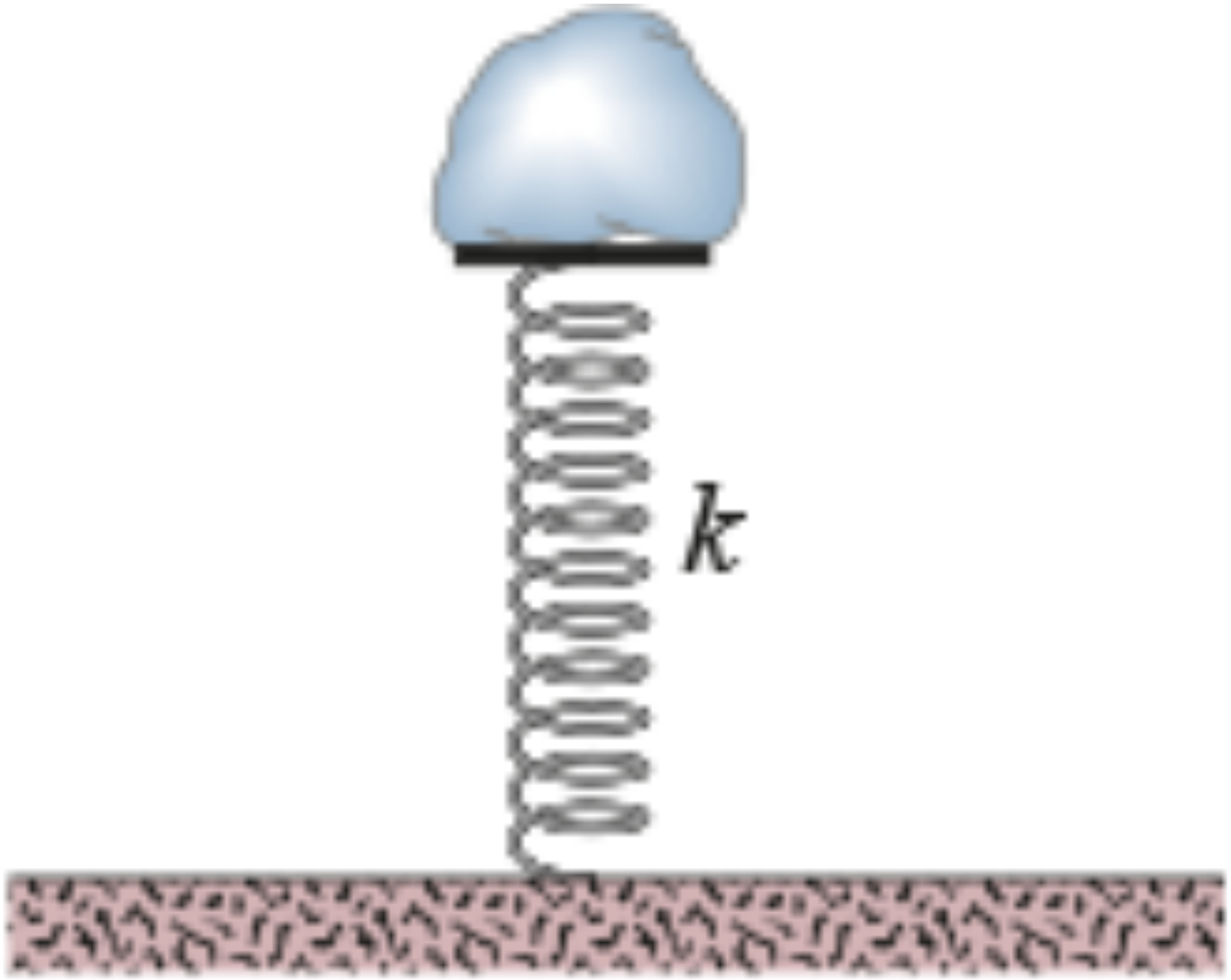

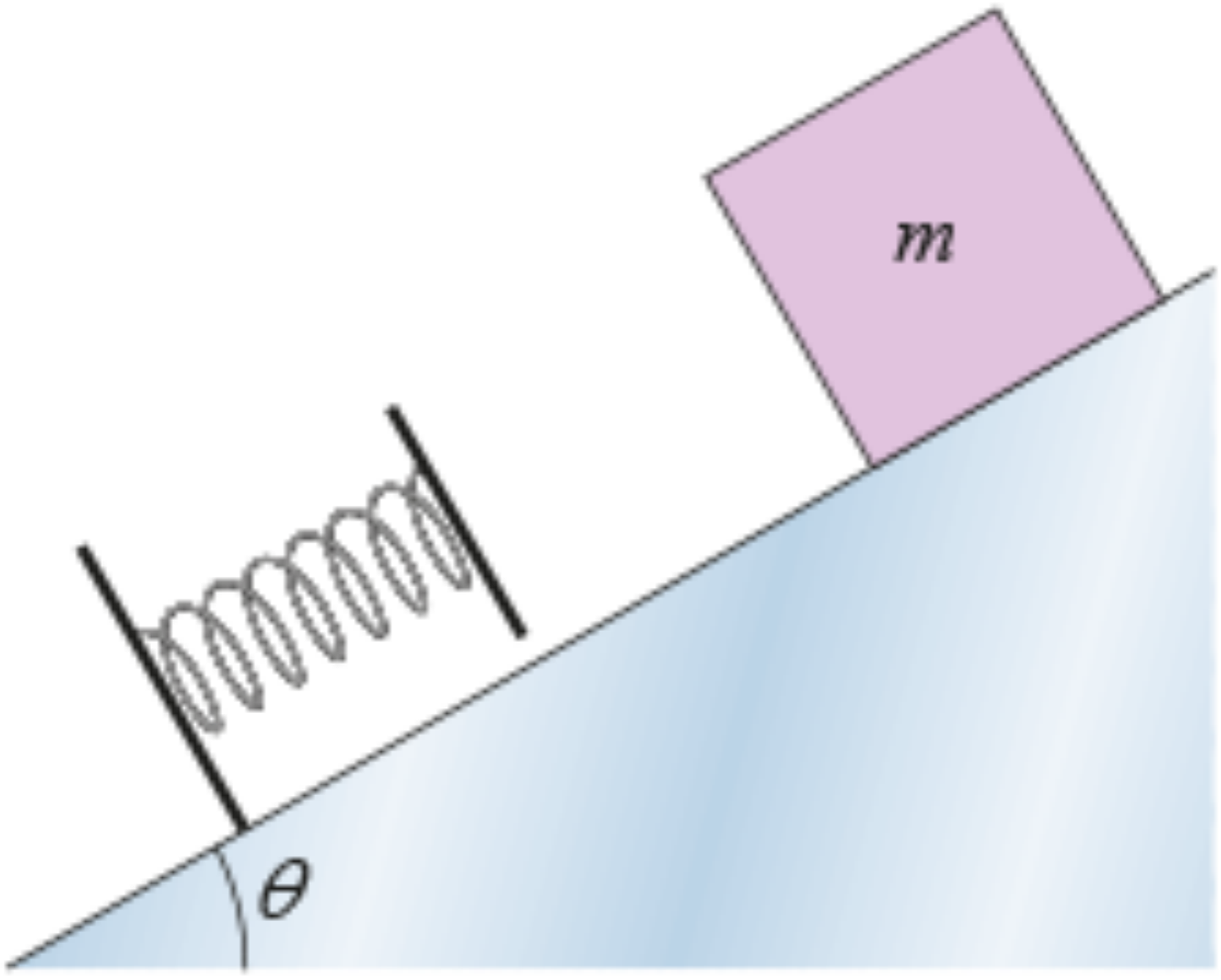

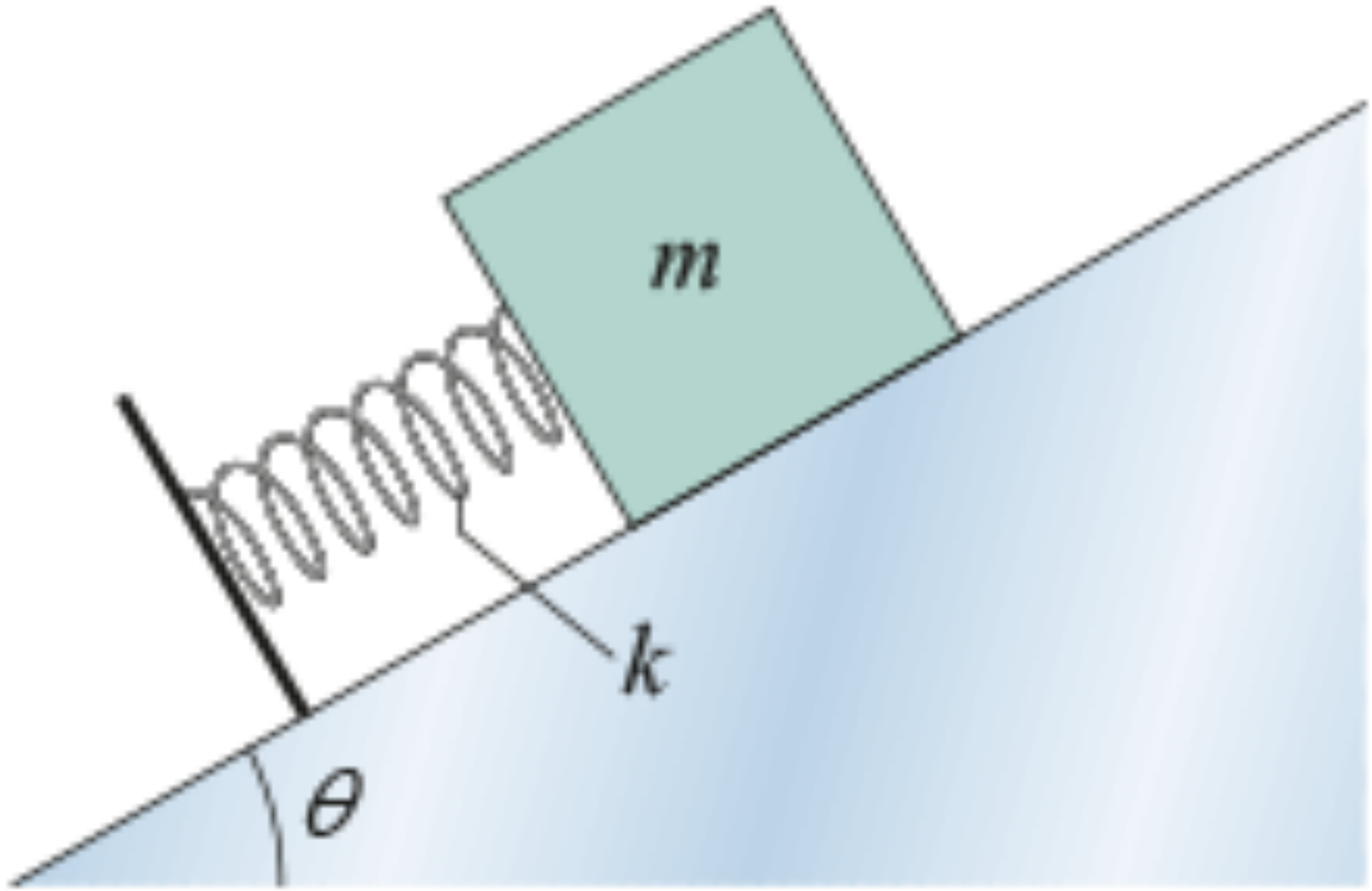

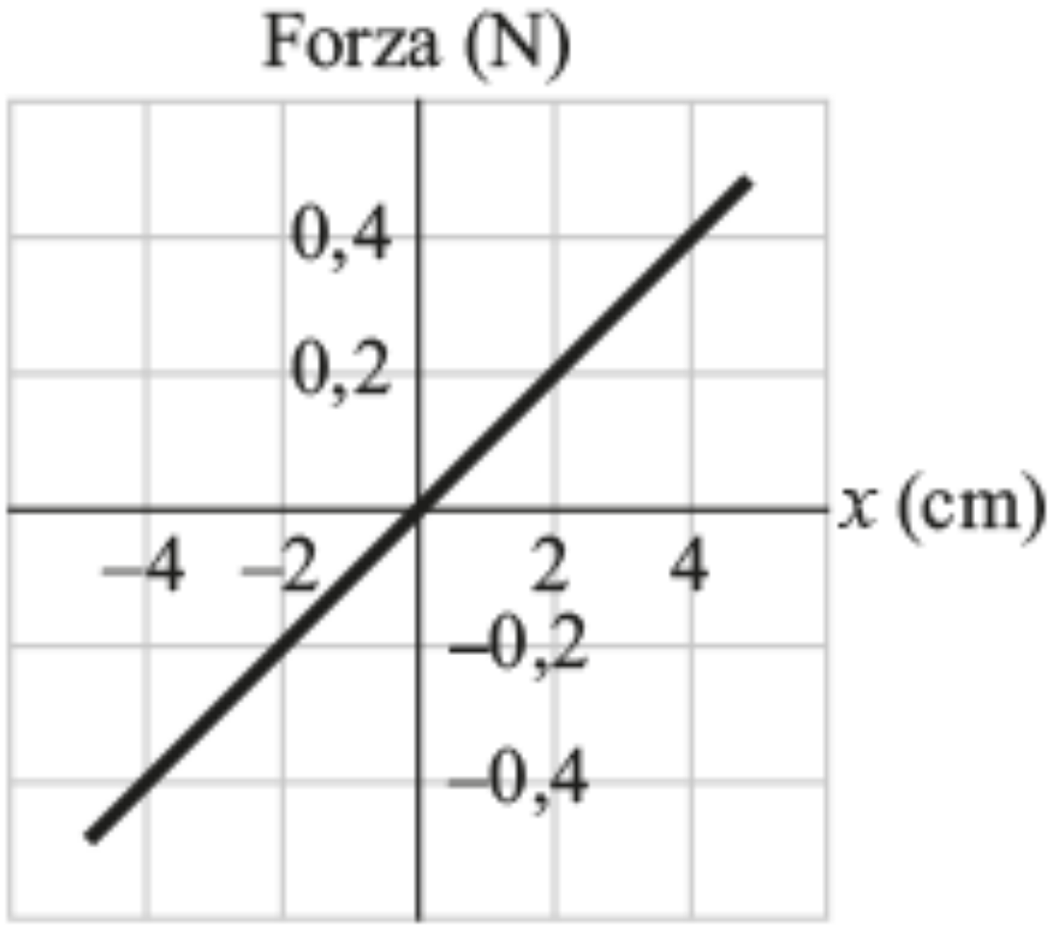

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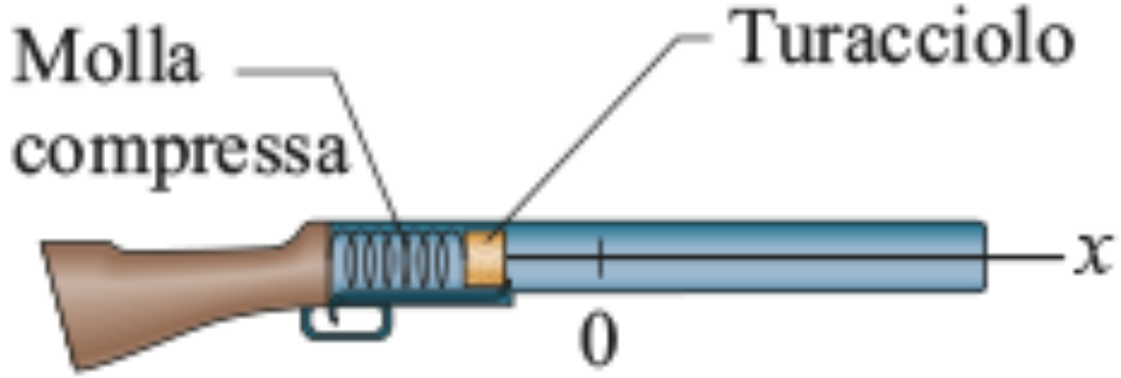

(b)