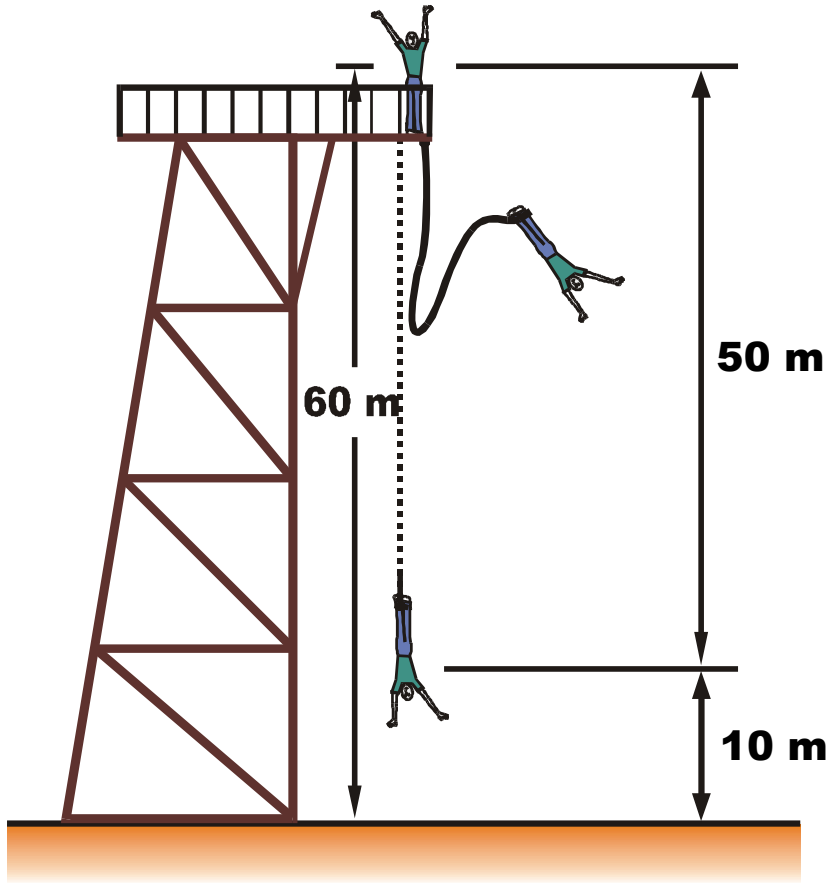
Particle Work Energy: Example Problem 3

An 80 kg college student jumps off of a 60 m high bungee jump tower. (Treat him as a particle). The unstretched length of the bungee cord is 15 m. He comes to a stop 10 m off of the ground. Please determine:

(a) The spring constant of the cord;

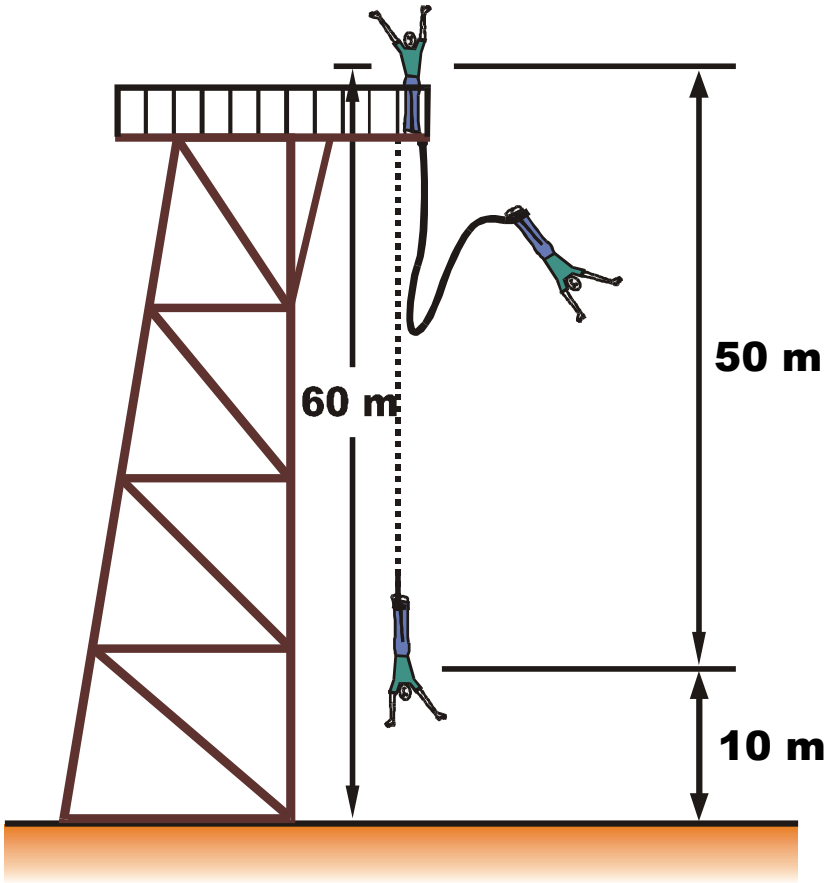
(b) The acceleration of the man upward at the moment he stops;

(c) The location (measured from the top of the tower) at which the man reaches his maximum speed.



Bungee cord spring constant: k = ?

Bungee cord unstretched length: L = 15 m



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