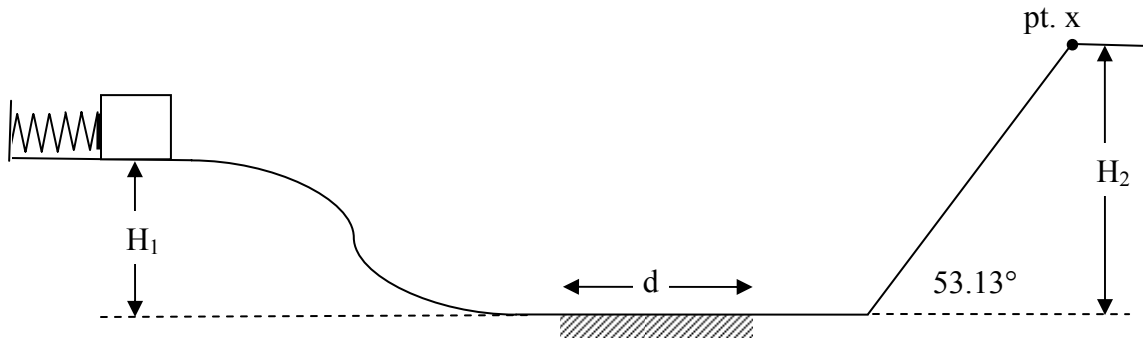


W6.05d

Energy



1a) A 10-kg box is held against a spring which is compressed 2.0 m as shown on top of an incline which is 4.0 m (H_1). Find the minimum spring constant (k) so that the box just makes it to the top of the 8.0 m (H_2) high second incline. Note: all surfaces are frictionless **except** the crosshatched surface where $d = 20$ m and has a coefficient of friction of 0.20.

2b] A 10-kg box is held against a spring which is compressed 2.0 m as shown on top of an incline which is 4.0 m (H_1). Find the minimum spring constant (k) so that the box just makes it to the top of the 8.0 m (H_2) high second incline. Note: all surfaces are frictionless **except** the crosshatched surface where $d = 20$ m and has a coefficient of friction of 0.2 **and** the incline where $\mu = 0.20$.

KEY-W6.05d

- 1] 400 N/m
- 2] 460 N/m