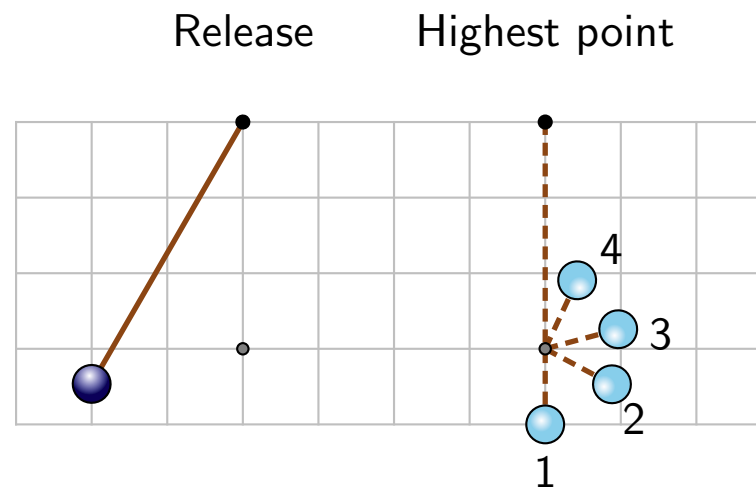


# Question 1

A pendulum is released from rest. The string encounters a “peg” in its path. Which indicates the highest point that the pendulum ball reaches after the string strikes the peg?



## Question 2

A 2 kg red cart moves straight north with speed 10 m/s. A 4 kg blue cart moves straight west with speed 5 m/s.

Which of the following is true?

1. The carts have the same momentum.
2. The carts have opposite momenta since one is positive and the other negative.
3. The carts have different momenta.
4. The magnitudes of the momenta are different.