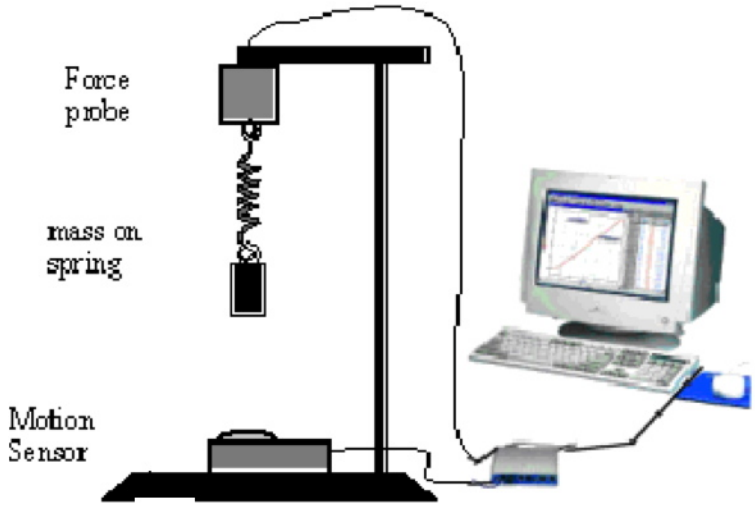
When we pull the mass down from its equilibrium, what happens to the energies?

The gravitational PE

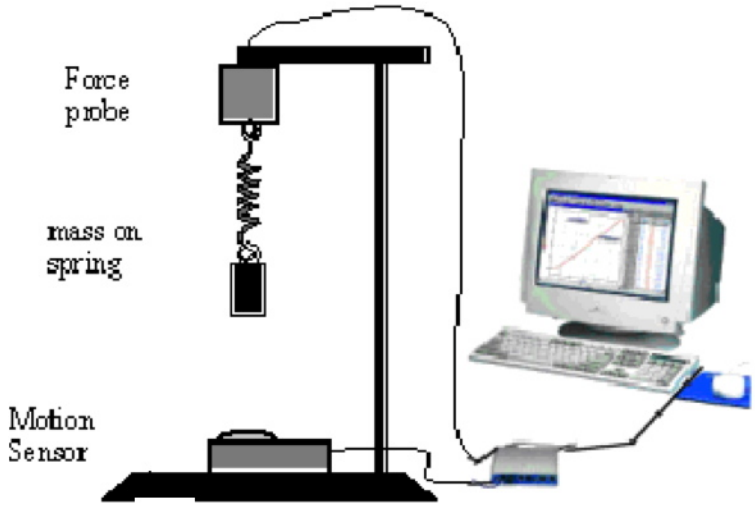
A. increases
B. decreases
C. remains the same
D. you can't tell from the information given.



When we pull the mass down from its equilibrium, what happens to the energies?

The spring PE

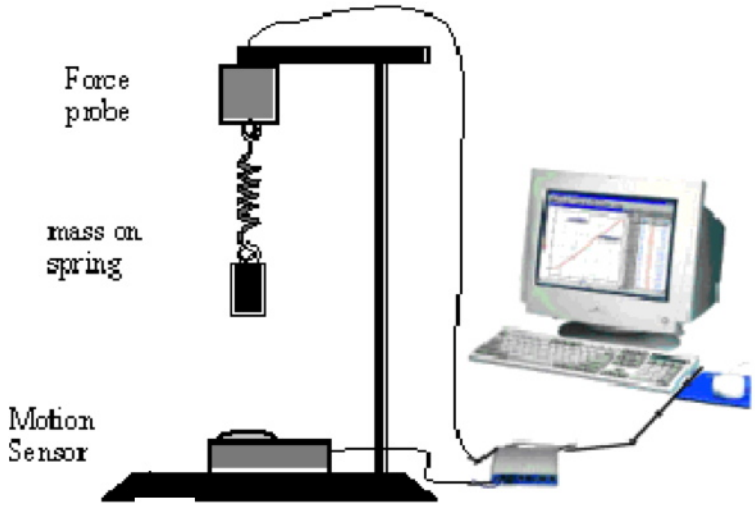
A. increases
B. decreases
C. remains the same
D. you can't tell from the information given.



When we push the mass up from its equilibrium, what happens to the energies?

The spring PE

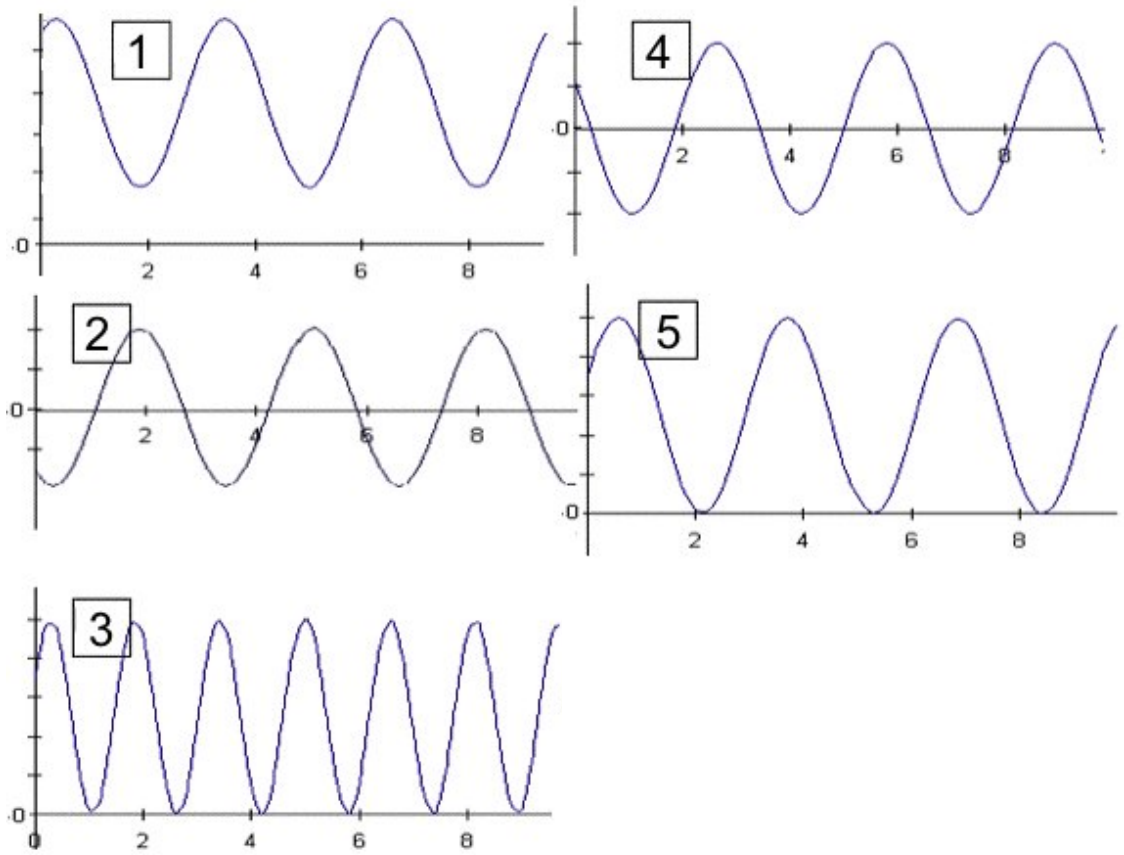
A. increases
B. decreases
C. remains the same
D. you can't tell from the information given.



A mass is hanging from a spring. The position of the mass is measured by a sonic ranger sitting 25 cm under the mass's equilibrium position. At some time, the mass is started oscillating.

At a later time, the sonic ranger begins to take data.

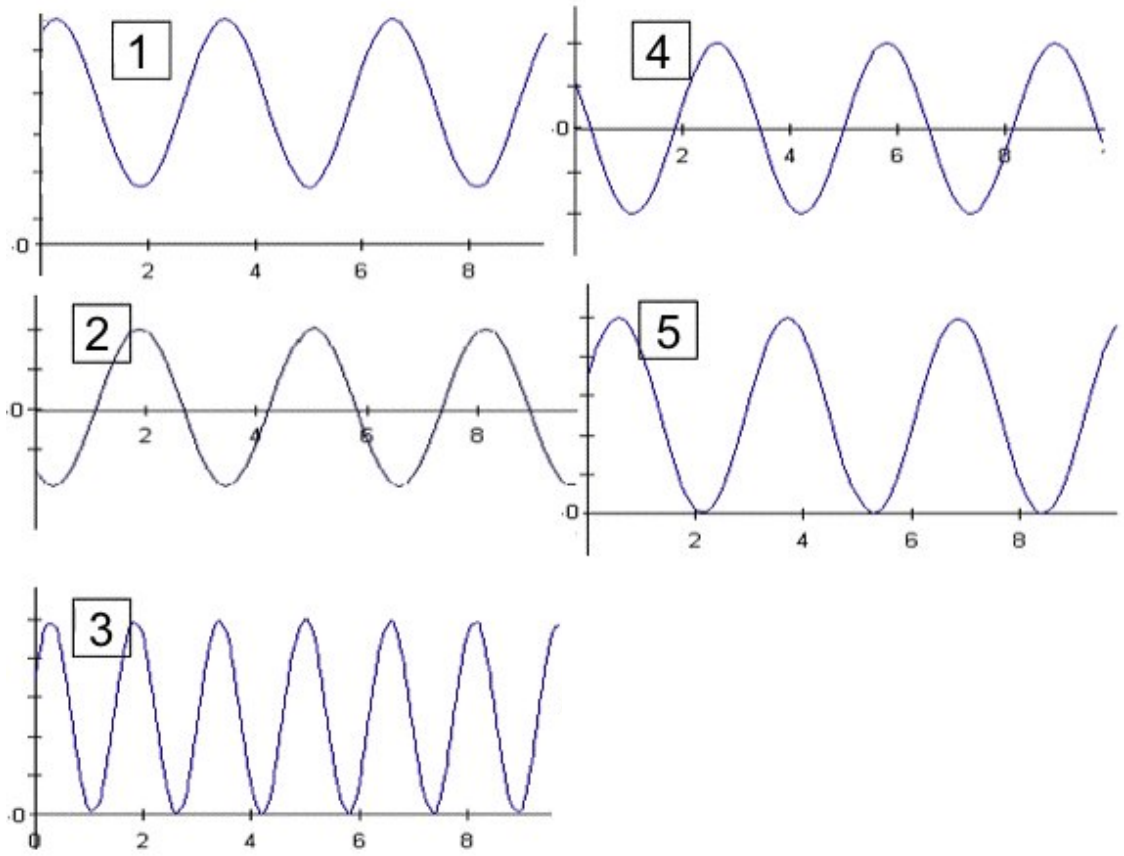
If graph 1 represents the position shown by the ranger which graph could represent the **velocity** of the mass?



A mass is hanging from a spring. The position of the mass is measured by a sonic ranger sitting 25 cm under the mass's equilibrium position. At some time, the mass is started oscillating.

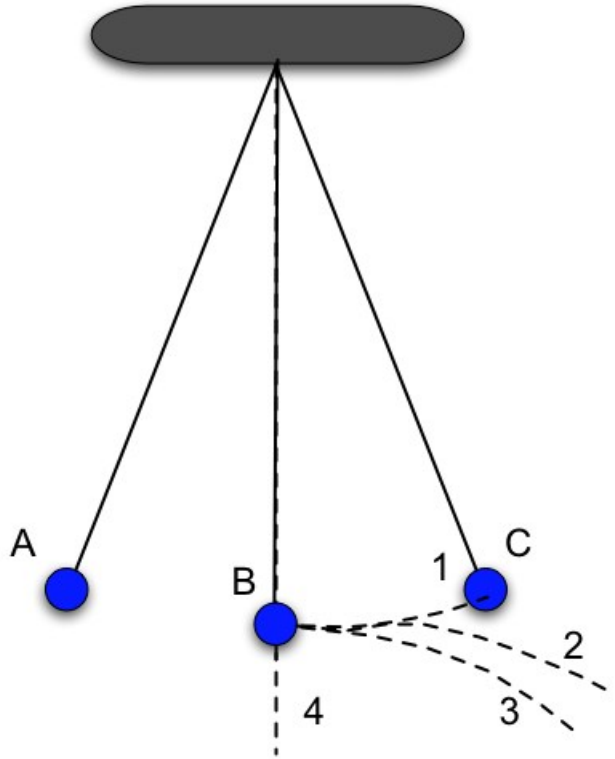
At a later time, the sonic ranger begins to take data.

Which graph could represent the **net force** on the mass?



A pendulum is swinging back and forth between the extremes marked A and C. At point B it is directly below the pivot.

When it reaches B, the string breaks. What path will the ball follow after the break?



A pendulum is swinging back and forth between the extremes marked A and C. At point B it is directly below the pivot.

When it reaches C, the string breaks. What path will the ball follow after the break?