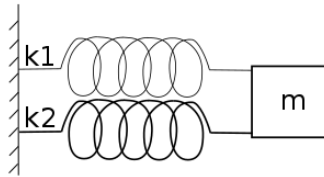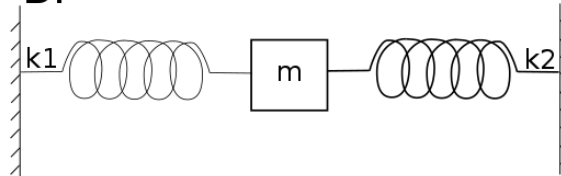Consider the following configuration of springs with two different spring constants, k_1, and k_2 and a block with mass m. Find the angular frequency of oscillation for each situation. The block slides on a frictionless horizontal surface. Neglect the weights of the springs and any torques applied to the block.

Hint: Use hook's law and appropriate free-body diagrams to find the effective spring constant for each situtation and then use $\omega = \sqrt{\frac{k_{\text{eff}}}{m}}$

A.

B.

C.