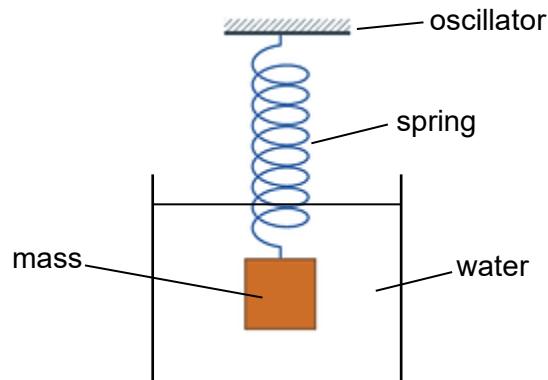


- 16 A light spring hangs vertically from a driving oscillator. A mass is attached to the free end of the spring and is submerged in water as shown.

The mass is made to oscillate vertically at various frequencies of the oscillator. The oscillator has a constant amplitude at all frequencies.

The experiment is then repeated with the mass submerged in oil.



Which graph shows how the amplitude  $A$  of the oscillating mass varies with the frequency  $f$  at which it is driven when the mass is in water and oil?

