Question #75733, Physics / Other

A fish weighs 10 N at rest, When it is weighed on a spring scale in an elevator accelerating upwards at 22.2m/s^ the scale reads?

Solution

The fish weight at rest = $mg = 10\,\text{N}$

The fish weight in the elevator is $m(g+a) = \dfrac{10}{9.8}(9.8+22.2) = 32.7\,\text{N}$

Answer: 32.7 N