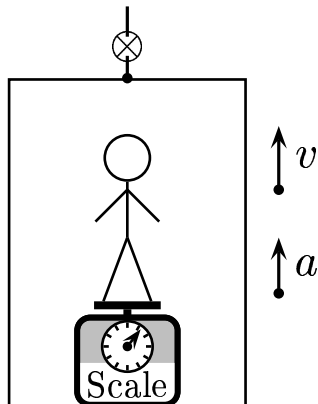


When the elevator was moving upward at a constant speed, the scale reading S , was 50 N. As it further accelerated upward, the rope suddenly broke.



After this what is the scale reading?

- A) $S = 0 \text{ N}$
- B) $0 < S < 50 \text{ N}$
- C) $S = 50 \text{ N}$
- D) $S > 50 \text{ N}$

After the rope breaks $a = g$.

N. Using the equation given in the hint, one finds that $F_{scale} = 0$ or $S = 0$.

Answer **A**.

05.07-07 After the rope is broken 2004-3-24