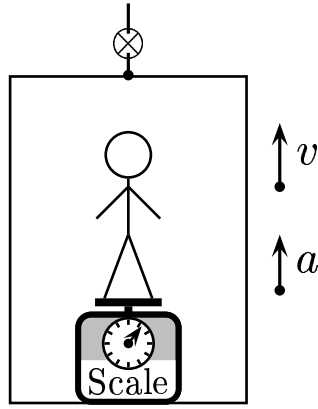


When the elevator was moving upward at a constant speed, the scale reading  $S$ , was 50 N. As it further accelerated upward, the rope suddenly broke.



After this what is the scale reading?

- A)  $S = 0$  N
- B)  $0 < S < 50$  N
- C)  $S = 50$  N
- D)  $S > 50$  N

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After the rope breaks  $a = g$ .

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

Answer **A**.