

17 A man of mass 75 kg runs up a staircase consisting of 30 steps. Each step is 20 cm high.

The man takes a time of 7.0 s to run from the bottom of the staircase to the top.

What is the average rate of increase of gravitational potential energy of the man?

A 64 W

B 450 W

C 630 W

D 4400 W