

Question #23269

a truck travelled at 25 meters per second puts its break on for 4 seconds. this produces acceleration of 2 meters per second square.what does the truck's velocity drop to?

Solution:

The equation of velocity on equally accelerated motion is:

$$v = v_0 + at$$

$$v_0 = 25 \text{ m/s}$$

$$a = -2 \text{ m/s}^2$$

$$t = 4 \text{ s}$$

$$v = 25 - 2 * 4 = 17 \text{ m/s}$$

Answer: 17 m/s.