

Answer on Question #62210-Physics – Mechanics | Relativity

A jet plane lands with a speed of 111.1 m/s and accelerates at a rate of -5.4 m/s² as it comes to rest from the inside the plane touches the runway what is the time needed before it can come to rest

Solution

$$v_f - v_i = at_{stop}$$

$$t_{stop} = \frac{v_f - v_i}{a} = \frac{0 - 111.1}{-5.4} = 20.6 \text{ s.}$$

Answer: 20.6 s.

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