

[\[Item View \]](#)[\[Print \]](#)**Problem 2.53**

A 200kg weather rocket is loaded with 100 kg of fuel and fired straight up. It accelerates upward at 35.0 m/s^2 for 34.0 s, then runs out of fuel. Ignore any air resistance effects.

Part A

What is the rocket's maximum altitude?

ANSWER: | *Answer not displayed* km

Part B

How long is the rocket in the air?

ANSWER: | *Answer not displayed* s