

An 85 kg astronaut pushes off a 675 kg satellite with a constant force. After 5 seconds the two separate and the astronaut is moving with a speed of 2.0 m/s. How far apart are they 1 minute after the astronaut begins the push?

If your answer is ± 50 cm: Great Job! You should work for NASA.

If your answer is ± 1.0 m: Pretty good.

If your answer is ± 10 m: Not bad.