

In 1990, Dave Campos of the United States rode a special motorcycle called the Easyrider at an average speed of 518 km/h. Suppose that at some point Campos steadily decreases his speed from 100.0 percent to 60.0 percent of his average speed during an interval of 2.00 min. What is the distance traveled during that time interval?

Equation for distance:

$$S = \frac{v_1 + v_2}{2} t \text{ (motion with uniform acceleration)}$$

where v_1 – initial speed, v_2 – final speed, t - time.

Therefore, the distance equals:

$$S = \frac{1 * 518 + 0.6 * 518 \text{ km}}{2} \frac{1}{h} * 2 \text{ min} = \frac{1.6}{2} 518 \frac{\text{km}}{h} * \frac{2}{60} h = 13.8 \text{ km}$$

Answer: 13.8 km