O2_mu_1

[m]

120 km = 120000 m 1,2 h = 4320 s

$x_F = x_0 + vt$; $120000 = v \cdot 4320$

$v = \frac{120000}{4320} = 27,778 \text{ m/s}$

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[u] 35 km = 35000 m 30 min = 1800 s

$x_F = x_0 + vt$

$35000 = 1800 \cdot v$

$v = 19,444 \text{ m/s}$

50 km = 50000 m 40 min = 2400 s

$x_F = x_0 + vt$

$50000 = 0 + v \cdot 2400$

$v = 20,833 \text{ m/s}$

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[r] $25 \frac{m}{s}$ 100 km = 100000 m

$x_F = x_0 + vt$

$100000 = 25 \cdot t$

$t = 4000 \text{ s}$

$120 \frac{km}{h} = 33,333 \frac{m}{s}$ 150 km = 150000 m

$150000 = 33,33 \cdot t$

$t = 4500,045 \text{ s}$

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[s] 3,33 m/s 6 km = 6000 m

$x_F = x_0 + vt \rightarrow 60000 = 3,33t$ $t = 1801,802 \text{ s}$

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[i] 42 km = 42000 m $12 \frac{km}{h} = 3,333 \text{ m/s}$

$x_F = x_0 + vt \rightarrow 42000 = 0 + 3,333t$

$t = 12601,26 \text{ s}$

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[e] $6 \frac{km}{h} = 1,667 \text{ m/s}$ 25 min = 1500 s

$x_F = x_0 + vt$; $x_F = 0 + 1,667 \cdot 1500 = 2500,5 \text{ m}$

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[l] $0,02 \frac{m}{s}$ 1 min = 60 s

$x_F = x_0 + vt \rightarrow x_F = 0 + 0,02 \cdot 60 = 1,2 \text{ m}$

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[a] $85 \frac{km}{h} = 23,611 \frac{m}{s}$ 250 km = 250000 m

$x_F = x_0 + vt \rightarrow 250000 = 0 + 23,611 \cdot t$

$t = 10588,285 \text{ s}$

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[s] 100 m 15 s

$x_F = x_0 + vt$; $100 = 0 + v \cdot 15$

$v = 6,667 \frac{m}{s}$

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[o] v = 340 m/s 500 m

$x_F = x_0 + vt \rightarrow 500 = 340 \cdot t$

$t = 1,47 \text{ s}$