DOMAĆI RAD

1) Kojom se brzinom giba točka na ekvatoru Zemlje zbog njene rotacije oko svoje osi?

2r = 13 000 km *
O = ?
O = 2rπ
O = 13 000 km · 3.14
O = 40 820 km

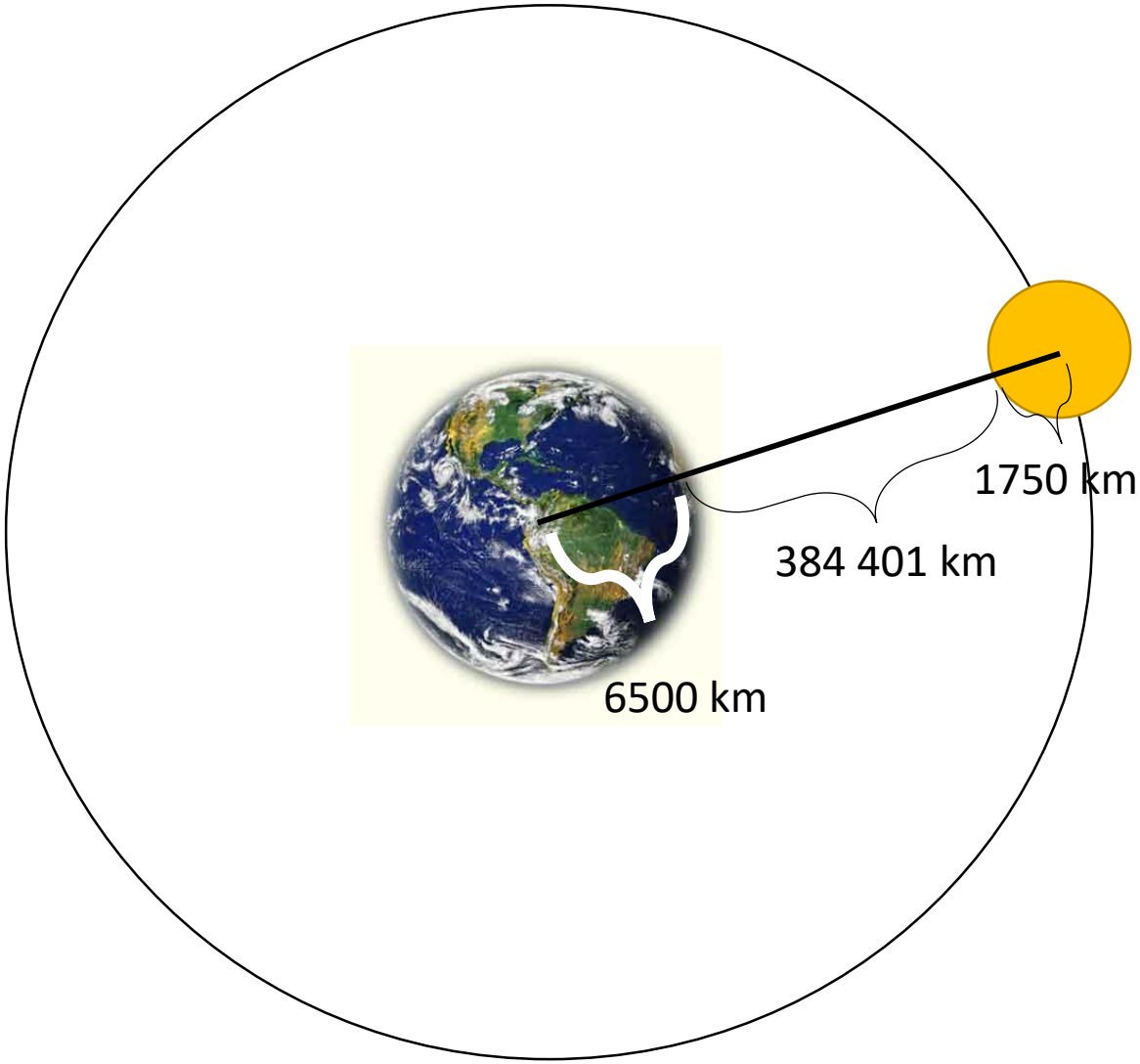
$V = \frac{s}{t}$
S = 40 820 km
t = 24 h
$V = \frac{40\ 820\ km}{24\ h}$
V ≈ 1 700 km / h



* https://www.youtube.com/watch?v=GoW8Tf7hTGA

2) Kojom se brzinom vrti Mjesec oko Zemlje?

r = 6 500 km + 384 401 km + 1 750 km = 392 651 km *



r = 392 651 km ⟹ 2r = 785 302 km

O = ?

O = 2rπ

O = 785 302 km · 3.14

O = 2 465 848 km

V = $\frac{s}{t}$

t = (27 · 24 + $\frac{43}{60}$) h

t = 655. 71 h

V = $\frac{2\ 465\ 848\ km}{655.71\ h}$

V = 3 760 .58 km / h

* https://www.youtube.com/watch?v=GoW8Tf7hTGA

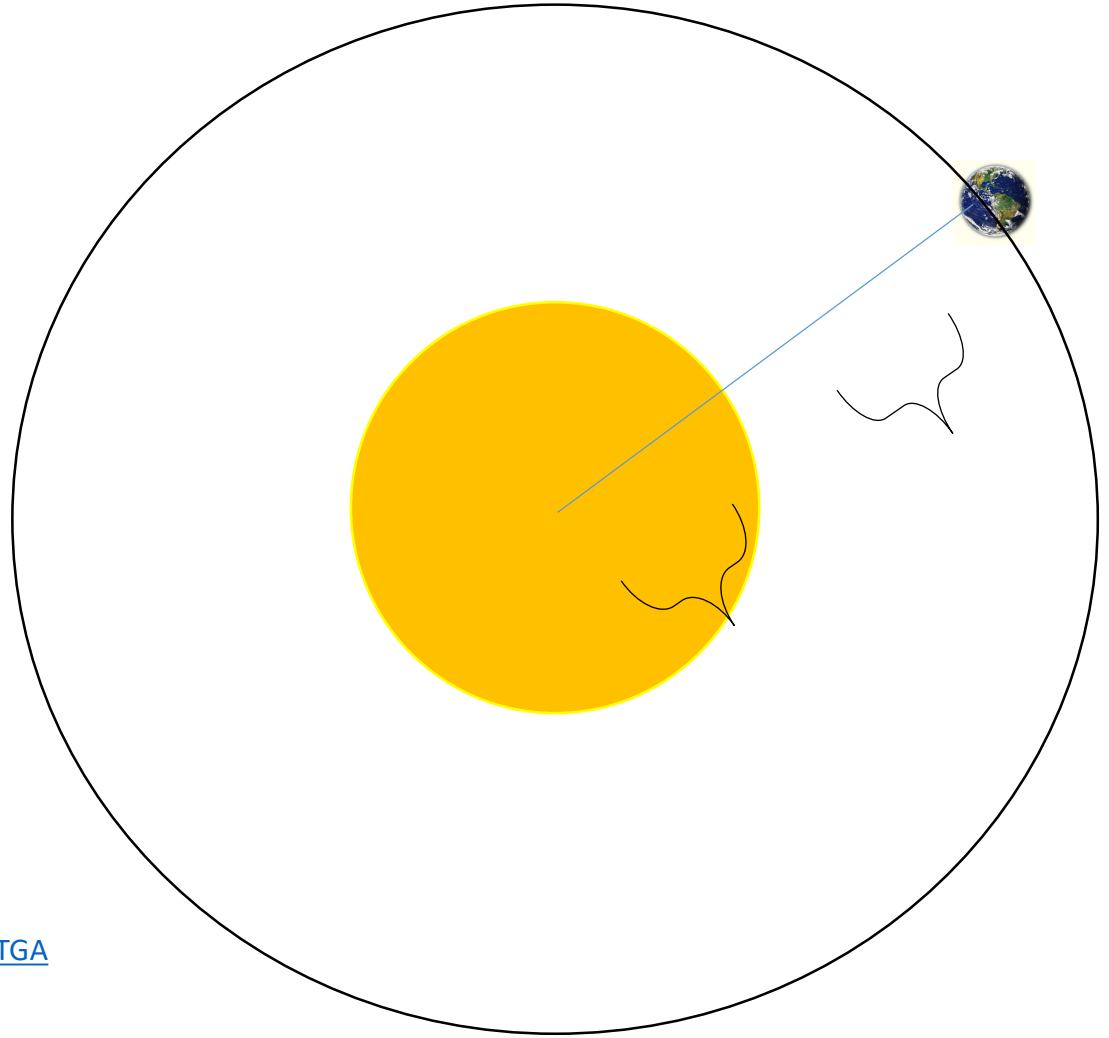
3) Kojom se brzinom giba Zemlja oko Sunca ?

Sunce $\Longrightarrow$ 2r = 1 400 000 km

Udaljenost Sunca od Zemlje $\Longrightarrow$ 149 600 000 km + 1 400 000 = 151 000 000 km *

r = 151 000 000 $\Longrightarrow$ 2r = 302 000 000 km
O = ?
O = 2rπ
O = 302 000 000 km · 3.14
O = 948 280 000 km

V= $\frac{s}{t}$
t = (365 ·24 + 6) h
t = 8 766 h
V = $\frac{948\ 280\ 000\ km}{8\ 766\ h}$
V = 108 117. 05 km / h



https://www.youtube.com/watch?v=GoW8Tf7hTGA