

Primitivas na vida real

Função real de variável real

POSITION VS VELOCITY

Time (t) in hours	Velocity (v) in mph.
0	0
1	20
2	40
3	60
4	80

$$v = 20t$$



velocity

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$a(t)$: aceleração no instante t (Km/h^2)

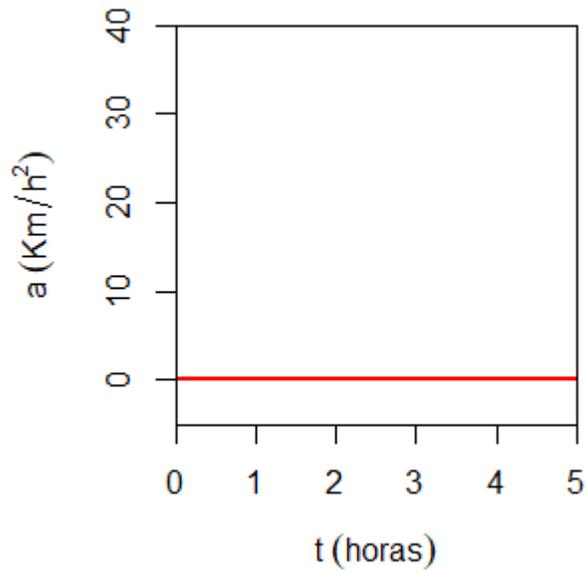
$v(t)$: velocidade no instante t (Km/h)

$s(t)$: posição no instante t (Km)

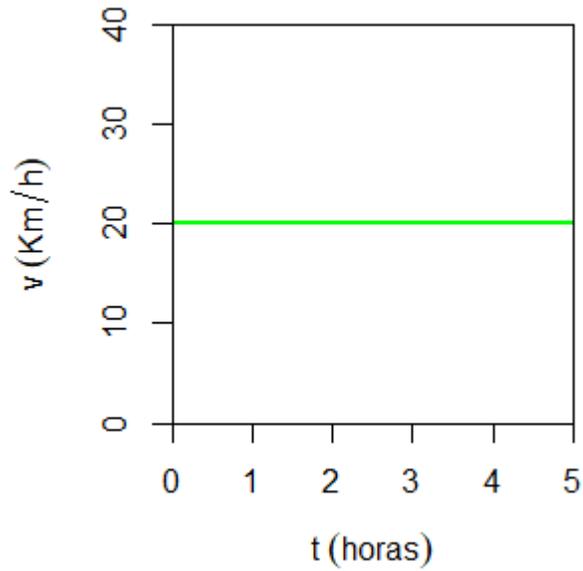
$$a(t) = v'(t) \Leftrightarrow v = P a$$

$$v(t) = s'(t) \Leftrightarrow s = P v$$

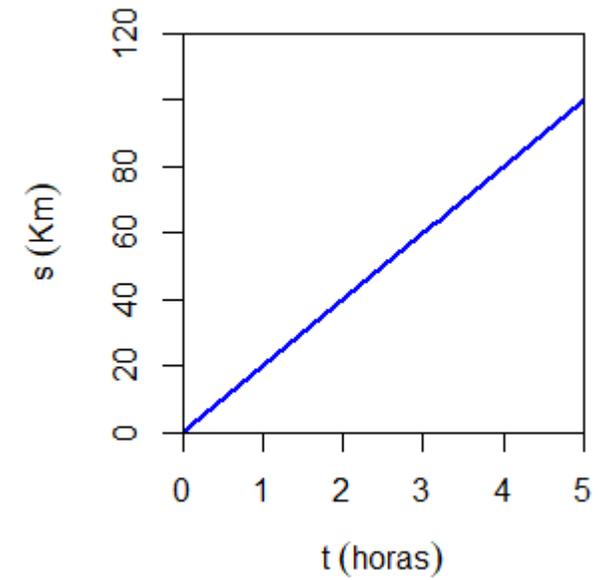
$$a(t) = 0$$



$$v(t) = P0 = 20$$

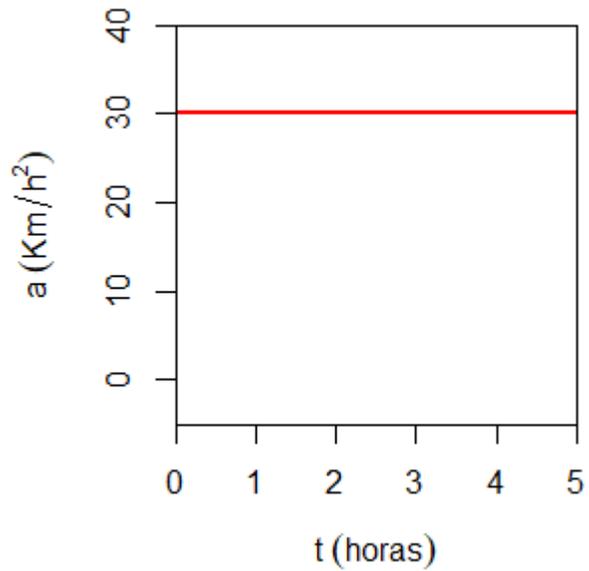


$$s(t) = Pv = 20 t$$

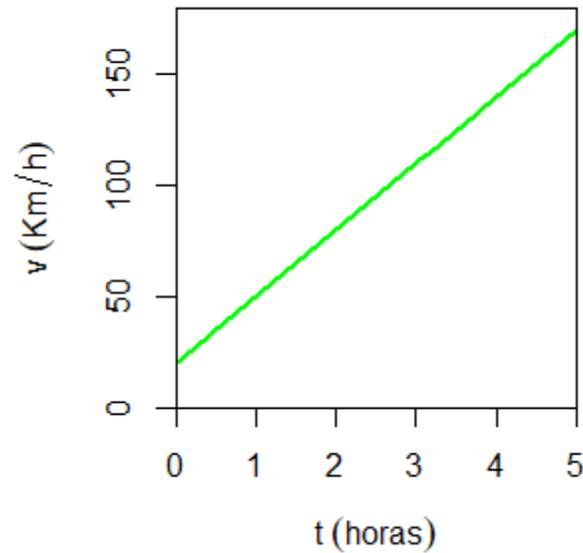


Movimento uniforme

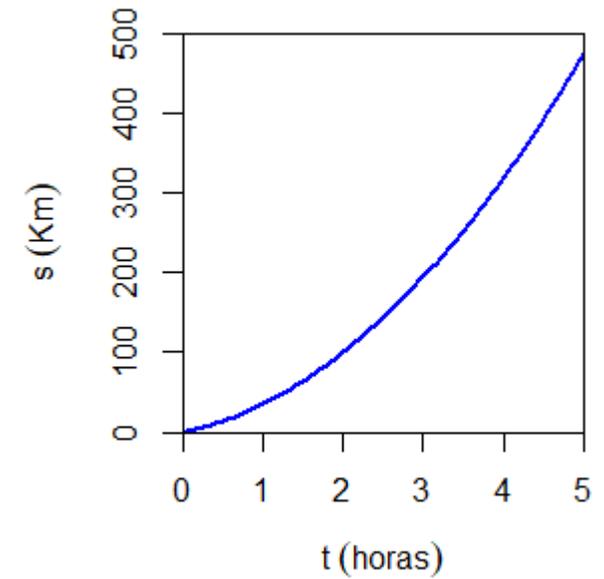
$$a(t) = 30$$



$$v(t) = P 30 = 30t + 20$$



$$s(t) = Pv = \frac{30}{2}t^2 + 20t$$



Movimento uniformemente acelerado