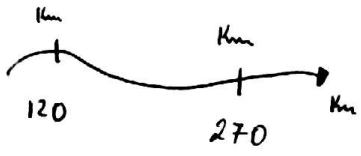
GABARITO LISTA DE EXERCÍCIO RECUPERAÇÃO - 1º ANO I 15

1 –



$\Delta S = S - S_0$

$\Delta s = 270 - 120$

$\Delta S = 150\,Km$

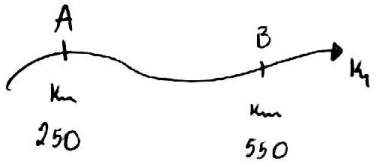
2 –

$\Delta S = S - S_0$

$\Delta S = 80 - 240$

$\Delta s = -160\,Km$

3 –

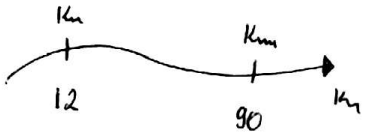


$\Delta S = S - S_0$

$\Delta S = 550 - 250$

$\Delta S = 300\,Km$

4 –

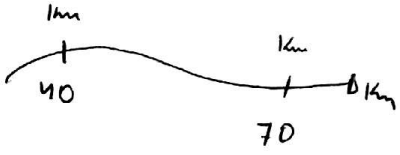


$\Delta S = S - S_0$

$\Delta s = 90 - 12$

$\Delta S = 78\,Km$

5 –



a) $S_0 = 1km\,40$

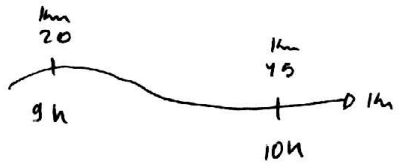
$S = 1km\,70$

b) $\Delta S = S - S_0$

$\Delta S = 70 - 40$

$\Delta S = 30\,Km$

6 –



a) $S_0 = 1km\,20$

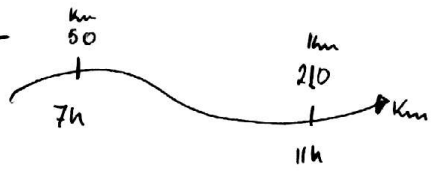
$S = 1km\,45$

b) $\Delta S = S - S_0$

$\Delta S = 45 - 20$

$\Delta S = 25\,Km$

7 –



$V_m = \frac{\Delta s}{\Delta t}$

$V_m = \frac{210 - 50}{11 - 7}$

$V_m = \frac{160}{4,0}$

$V_m = 40\,Km/h$

8-

$\Delta s = 1200\ m$

$\Delta t = 4.0\ min$

$V_m = \frac{\Delta s}{\Delta t}$

$V_m = \frac{1200}{240}$

$V_m = 5,0\ m/s$

1 min — 60 s

4,0 min — x

$x = 240\ s$

9-

$\Delta s = 9,0\ m$

$V = 36\ km/h \div 3,6 = 10\ m/s$

$\Delta t = ?$

$V_m = \frac{\Delta s}{\Delta t} \Rightarrow 10 = \frac{9,0}{\Delta t} \Rightarrow \Delta t = \frac{9,0}{10}$

$\Delta t = 0,9\ s$

10 -

$\Delta s = S - S_0$

$\Delta s = 60 - 20$

$\Delta s = 40\ m$

$V_m = \frac{\Delta s}{\Delta t}$

$V_m = \frac{40}{5,0}$

$V_m = 8,0\ m/s$

11-

$S = 30 + 10.t$

$S = S_0 + V.t$

$S_0 = 30\ m$

$V = 10\ m/s$

12 -

$S = -5 + 20.t$

$S = S_0 + V.t$

a) $S_0 = -5,0\ m$

$V = 20\ m/s$

b) $V = 20\ m/s$

c) $S = -5 + 20.t$

$S = -5 + 20.5$

$S = -5 + 100$

$S = 95\ m$

13 -

$S = 8,0 + 3.t$

$35 = 8,0 + 3.t$

$35 - 8,0 = 3.t$

$27 = 3.t$

$\frac{27}{3} = t$

$t = 9,0\ s$

14 -

$S_0 = 10\,m$

$V = 5{,}0\,m/s$

$S = S_0 + V.t$

$S = 10 + 5{,}0.t$

15 -

$S = 50 - 10.t$

a) $0 = 50 - 10.t$

$-50 = -10.t \quad (-1)$

$\frac{50}{10} = t$

$t = 5{,}0\,s$

b) $S = 50 - 10.10$

$S = 50 - 100$

$S = -50\,m$

16 -

$S_A = 10 + 7.t$

$S_B = 50 - 3.t$

$S_A = S_B$

$10 + 7.t = 50 - 3.t$

$10 - 50 = -3.t - 7.t$

$-40 = -10.t \quad (-1)$

$\frac{40}{10} = t$

$t = 4{,}0\,s$

$S_A = 10 + 7.4$

$S_A = 10 + 28$

$S_A = 38\,m$

17 -

$S_A = 30 - 80.t$

$S_B = 10 + 20.t$

$S_A = S_B$

$30 - 80.t = 10 + 20.t$

$30 - 10 = 20.t + 80.t$

$20 = 100.t$

$\frac{20}{100} = t$

$t = 0{,}2\,s$

$S_B = 10 + 20.0{,}2$

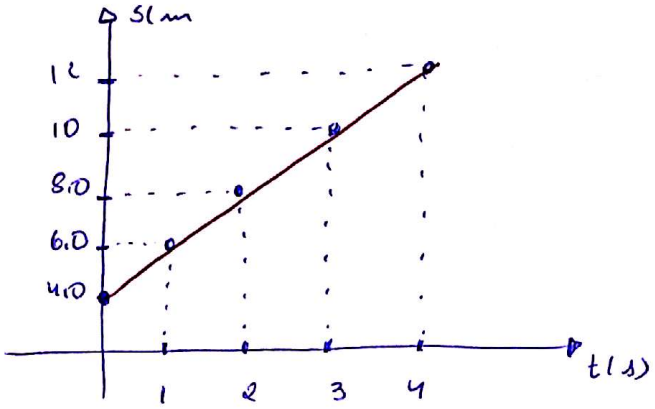
$S_B = 10 + 4$

$S_B = 14\,m$

18 -

$S = 4 + 2 \cdot t$

S	t
4,0	0
6,0	1
8,0	2
10	3
12	4



$S = 4 + 2 \cdot 0$

$S = 4,0\,m$

$S = 4 + 2 \cdot 1$

$S = 6,0\,m$

$S = 4 + 2 \cdot 2$

$S = 8,0\,m$

$S = 4 + 2 \cdot 3$

$S = 4 + 6$

$S = 10\,m$

$S = 4 + 2 \cdot 4$

$S = 12\,m$

19 -

a) $V = \frac{\Delta S}{\Delta t}$

$V = \frac{70}{7,0}$

$V = 10\,m/s$

b) $S = S_0 + V \cdot t$

$S = 10 + 10 \cdot t$

20 -

a) $S_0 = 2,0\,m$

b) $V = \frac{\Delta S}{\Delta T}$

$V = \frac{5,0}{1,0}$

$V = 5,0\,m/s$

c) $S = S_0 + V \cdot t$

$S = 2,0 + 5,0 \cdot t$

d) $S = 2,0 + 5,0 \cdot 20$

$S = 2,0 + 100$

$S = 102\,m$