

LEVANTAMENTO DAS ATIVIDADES DO 2º TRIMESTRE (BLOG DA ESCOLA)

FÍS 27/05/2020 - vídeo sobre inércia (Pode enviar ainda)

FÍS - 23/06/2020 - EDPUZZLE (Relâmpago - Ponto extra)

MAT - 01/07/2020 - EXERCÍCIOS (EMAIL) → Pode enviar ainda

MAT - Pitágoras 11/8 } Pode enviar ainda

FÍS - Temperatura 11/8 }

Estudos dirigidos { Google Forms

REVISÃO PARA A PROVA DE FÍSICA:

[kg]

ENERGIA [J] joule (S.I.)

CINETICA (MOVIMENTO)

$$E_c = \frac{mv^2}{2}$$

[m/s]

Potencial Elástica (mola)

[N/m]

$$E_{PE} = \frac{kx^2}{2}$$

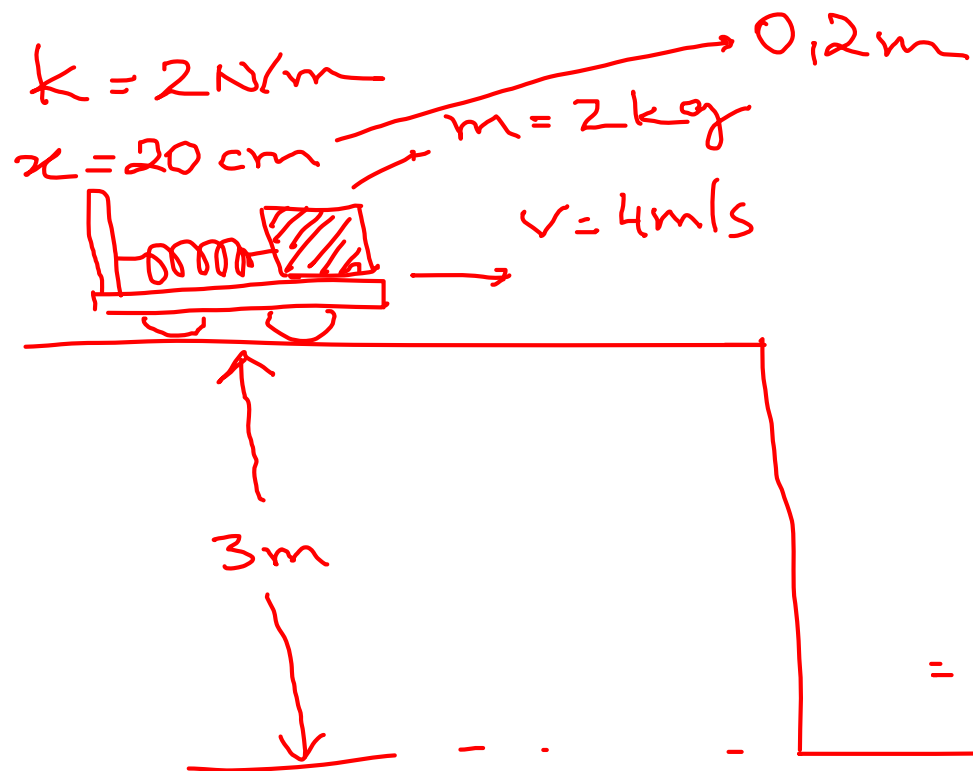
[m]

Potencial Gravitacional (altura)

$$E_{PG} = mgh$$

[m/s²] → [m]

$$E_c + E_{PG} + E_{PE} = E_{mec}$$



m	dm/cm
0,2	2

$g = 10 \text{ m/s}^2$

$E_{\text{mec}} = ?$
 $= 16 + 60 + 0,04 = \underline{\underline{76,04 \text{ J}}}$

$$E_c = \frac{mv^2}{2}$$

$$E_c = \frac{2 \cdot 4^2}{2}$$

$$E_c = \frac{2 \cdot 16}{2} = \underline{\underline{16 \text{ J}}}$$

$$E_g = mgh$$

$$E_g = 2 \cdot 10 \cdot 3$$

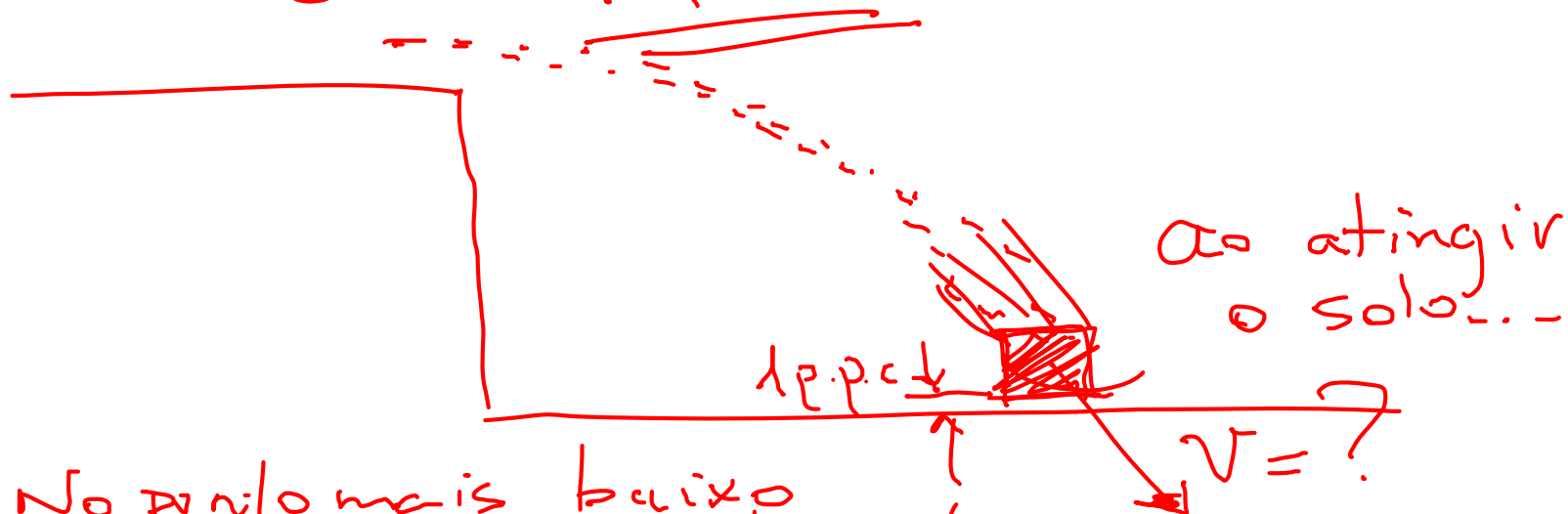
$$\boxed{E_g = 60 \text{ J}}$$

$$E_{pe} = \frac{kx^2}{2}$$

$$E_{pe} = \frac{2 \cdot 0,2^2}{2}$$

$$\boxed{E_{pe} = 0,04 \text{ J}}$$

$$E_{mec} = 76,04 \text{ J}$$



No ponto mais baixo da trajetória

$$E_{mec} = \underline{E_c} + \cancel{E_{pg}} + \cancel{E_{pe}}$$

$$76,04 = \frac{mv^2}{2}$$

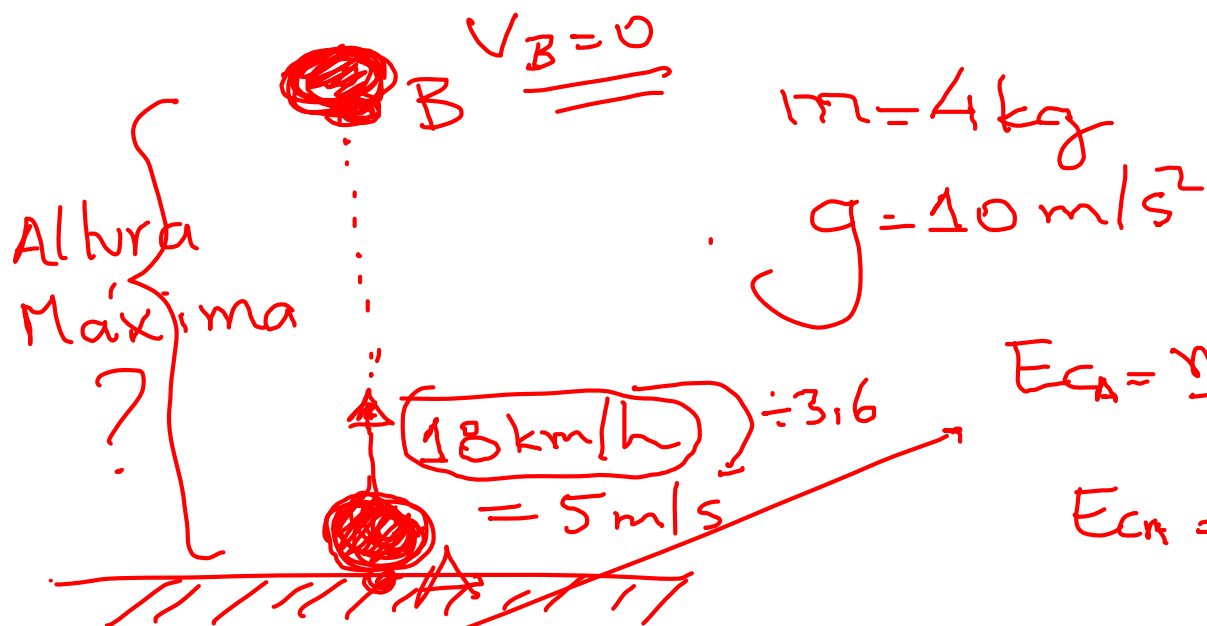
$$76,04 = \frac{\cancel{2} \cdot v^2}{\cancel{2}}$$

$$v^2 = 76,04$$

$$v = \sqrt{76,04}$$

$$v \approx 8,72 \text{ m/s} \approx 31,4 \text{ km/h}$$

x 3,6



$$\begin{array}{r} 5 \overline{) 10} \\ 10 \\ \hline 20 \\ \hline 0 \end{array} \quad \begin{array}{r} 4 \\ \hline 1,25 \end{array}$$

$$E_{CA} = \frac{mv^2}{2}$$

$$E_{CA} = \frac{4 \cdot 5^2}{2} = 2 \cdot 25 = \underline{\underline{50 \text{ J}}}$$

A) $E_{CA} = ?$ IV F) $E_{CB} = ?$ 0 J

B) $E_{PA} = ?$ 0 J G) $E_{PB} = ?$ 0 J

C) $E_{PA} = ?$ 0 J H) $E_{PB} = ?$ 50 J

D) $E_{mecA} = ?$ 50 J I) $h = ?$

E) $E_{mecB} = ?$ 50 J

$$E_{PG} = mgh$$

$$50 = 4 \cdot 10 \cdot h$$

$$E_{mecB} = \cancel{E_{CA}} + \cancel{E_{PB}} + \cancel{E_{CB}}$$

$$\boxed{50 \text{ J} = E_{PB}}$$

$$50 = 40 \cdot h$$

$$\frac{50}{40} = h = \underline{\underline{1,25 \text{ m}}}$$