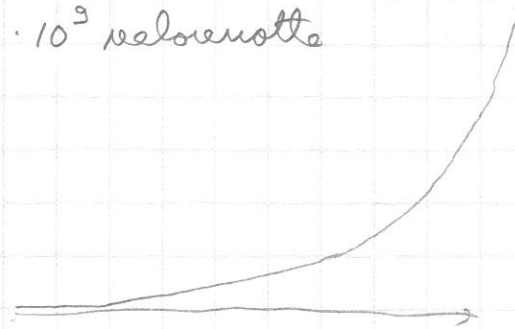
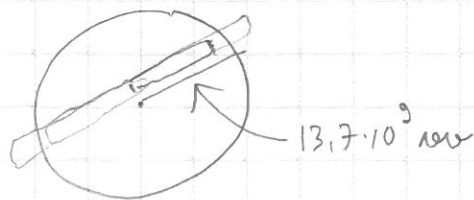


$$\begin{array}{l} 2, - 1, - \\ 3, - 1, - \\ \vdots \end{array} \quad ; \quad \begin{array}{l} 2 \cdot 2 \cdot 0,1 \text{ mm} \cdot 2 = 2^2 \cdot 0,1 \text{ mm} \\ 2 \cdot 2 \cdot 2 \cdot 0,1 \text{ mm} = 2^3 \cdot 0,1 \text{ mm} \end{array}$$

$$\begin{array}{l} a) 10, - 1, - \\ b) 100, - 1, - \end{array} \quad ; \quad \begin{array}{l} 2^{10} \cdot 0,1 \text{ mm} = 1024 \cdot 0,1 \text{ mm} = 102,4 \text{ mm} \approx 10 \text{ cm} \\ 2^{100} \cdot 0,1 \text{ mm} \approx 1,268 \cdot 10^{29} \text{ mm} \approx 1,3 \cdot 10^{26} \text{ m} \\ \approx 13 \cdot 10^9 \text{ velosidade} \end{array}$$



5.1 x  x $x^2 \rightarrow x$ in metros

 x $x^3 \rightarrow x$ in metros

a) $7^2 = 49$

b) $(-3)^4 = 81$

c) $(-3)^3 = -27$

5.4 a) $-3^2 + (-2)^2 = -9 + 4 = -5$

b) $12 + \frac{1}{2} \cdot (-4)^2 = 12 + \frac{1}{2} \cdot 16 = 12 + 8 = 20$

5.6 a) $1,496 \cdot 10^8 \text{ km} = 149600000 \text{ km}$

b) $12\,756\,280 \text{ m} \approx 1,28 \cdot 10^7 \text{ m}$

c) $4,6 \cdot 10^9 \text{ a} = 4600\,000\,000 \text{ a}$

5.9 $x = 299\,792 \frac{\text{km}}{\text{s}}$

a) $1 \text{ ly} = 365 \cdot 24 \cdot 60 \cdot 60 \cdot 299\,792 \frac{\text{km}}{\text{s}} \approx 9,45 \cdot 10^{12} \text{ km}$

b) $4,24 \text{ ly} = 4,24 \cdot 9,45424 \cdot 10^{12} \text{ km} \approx 40,08598 \cdot 10^{12} \text{ km} \\ \approx 4,01 \cdot 10^{13} \text{ km}$

5.13 a) $16 = (-2)^4$

b) $-32 = (-2)^5$

c) $-64 =$ di omister

6. Potências e suas propriedades

Exemplo $\frac{\text{lado}}{a)} 25^3 \cdot 4^3$

$\frac{14^2}{7^2}$