

Fracciones (24)  $\frac{5}{a} \div (3 \div \frac{b}{3}) = \frac{5}{a} \div (3 \cdot \frac{3}{b}) = \frac{5}{a} \div \frac{9}{b} = \frac{5}{a} \cdot \frac{b}{9} = \frac{5b}{9a}$

Notación científica:

$9,260,000,000 = 9.26 \cdot 10^9$

"Mentisa"

un núm. entre 1 y 10

potencia de 10 (exponente positivo o negativo)

$0.00000256 = 2.56 \cdot 10^{-6}$

$23,010,000,000 = 23.01 \cdot 10^8$   
 no es notación científica!  
 $= 2.301 \cdot 10^9$   
 eso sí!

$0.0002020 = 2.02 \cdot 10^{-4}$

1 2 3 4

$10^{-4} = \frac{1}{10^4} = \frac{1}{10,000}$

$2020.2020 = 2.020202 \cdot 10^3$

$1,000,0202 = \text{este mismo!}$  ✓

$250 = 2.5 \cdot 10^2$

$\frac{1}{0.1 \cdot 10^{-3}} = \frac{1}{0.0001}$

"callejón sin salida"

CS S

leyes de potencia

$\frac{1}{10^{-1} \cdot 10^{-3}} = \frac{1}{10^{-4}} = 10^4$

$a^b a^c = a^{b+c}$

$$\begin{aligned}
 & \boxed{30.} (7.6 \times 10^{-3})(1.2 \times 10^{-1}) = 7.6 \cdot 1.2 \cdot 10^{-3} 10^{-1} = 9.12 \cdot 10^{-3-1} = 9.12 \cdot 10^{-4} \\
 & \boxed{33.} \frac{9.45 \times 10^{-3}}{3.5 \times 10^2} \\
 & \boxed{36.} (6.3 \times 10^4)(3.7 \times 10^{-8}) \\
 & \boxed{39.} (9.1 \times 10^{-4})(7.4 \times 10^{-4})
 \end{aligned}$$

$$\begin{aligned}
 & \text{23,000} \\
 & \boxed{48.} \frac{0.0000286}{0.00143} = \frac{\cancel{2} \cdot 2.86 \cdot 10^{-5}}{1.43 \cdot 10^{-3}} = 2 \cdot 10^{-5+3} = \boxed{2 \cdot 10^{-2}}
 \end{aligned}$$

$$\begin{aligned}
 \boxed{53.} (4.78 \times 10^9)(1.96 \times 10^5) &= \underline{4.78 \cdot 1.96} \cdot 10^{9+5} \\
 &= 9.3688 \cdot 10^{14} \approx 9.369 \cdot 10^{14} \\
 & \quad \quad \quad 9
 \end{aligned}$$