

COMPITI PER SABATO 12 NOVEMBRE 2011

1. Svolgi le seguenti operazioni applicando la proprietà delle potenze

$$15 \cdot 10^{-3} \cdot 2 \cdot 10^{-5}$$

$$3 \cdot 10^{-6} \cdot 7 \cdot 10^{-3}$$

$$5 \cdot 10^{-2} \cdot 7 \cdot 10^{-12}$$

$$20 \cdot 10^{-13} : 2 \cdot 10^{-3}$$

$$21 \cdot 10^{-16} : 7 \cdot 10^{-12}$$

$$15 \cdot 10^{-15} : 3 \cdot 10^{-10}$$

2. Scrivi i seguenti numeri in notazione scientifica

0,00000000045

0,000000023

0,00000000881

$$1. \quad 15 \cdot 10^{-3} \cdot 2 \cdot 10^{-5} = 30 \cdot 10^{-3+(-5)} = 30 \cdot 10^{-3-5} = 30 \cdot 10^{-8}$$

$$3 \cdot 10^{-6} \cdot 7 \cdot 10^{-3} = 21 \cdot 10^{-6} \cdot 10^{-3} = 21 \cdot 10^{-6+(-3)} = 21 \cdot 10^{-6-3} = 21 \cdot 10^{-9}$$

$$5 \cdot 10^{-2} \cdot 7 \cdot 10^{-12} = 35 \cdot 10^{-2} \cdot 10^{-12} = 35 \cdot 10^{-2+(-12)} = 35 \cdot 10^{-14} = 35 \cdot 10^{-14}$$

$$20 \cdot 10^{-13} : 2 \cdot 10^{-3} = 10 \cdot 10^{-13} : 10^{-3} = 10 \cdot 10^{-13-(-3)} = 10 \cdot 10^{-13+3} = 10 \cdot 10^{-10} = 10^{-9}$$

$$21 \cdot 10^{-16} : 7 \cdot 10^{-12} = 3 \cdot 10^{-16} : 10^{-12} = 3 \cdot 10^{-16-(-12)} = 3 \cdot 10^{-16+12} = 3 \cdot 10^{-4}$$

$$15 \cdot 10^{-15} : 3 \cdot 10^{-10} = 5 \cdot 10^{-15} : 10^{-10} = 5 \cdot 10^{-15-(-10)} = 5 \cdot 10^{-15+10} = 5 \cdot 10^{-5}$$

$$1. \quad 0,00000000045 = 4,5 \cdot 10^{-10}$$

$$0,000000023 = 2,3 \cdot 10^{-8}$$

$$0,00000000881 = 8,81 \cdot 10^{-9}$$

$$\begin{aligned} & \left[\left(-\frac{3}{4} \right)^{-2} \right]^2 : \left[\left(-\frac{3}{4} \right)^2 \cdot \left(-\frac{3}{4} \right)^{-3} : \left(-\frac{3}{4} \right)^{-2} \right] = \\ & \left[\left(-\frac{3}{4} \right)^{-2} \right]^2 : \left[\left(-\frac{3}{4} \right)^{2+(-3)-(-2)} \right] = \\ & \left(-\frac{3}{4} \right)^{-4} : \left(-\frac{3}{4} \right)^{2-3+2} = \\ & \left(-\frac{3}{4} \right)^{-4} : \left(-\frac{3}{4} \right)^{+1} = \\ & \left(-\frac{3}{4} \right)^{-4-(+1)} = \\ & \left(-\frac{3}{4} \right)^{-4-1} = \left(-\frac{3}{4} \right)^{-5} \end{aligned}$$

m.º 576 pag. 106

$\sqrt{+36} = \begin{cases} +6 \\ -6 \end{cases}$	$\sqrt{-100} = \text{NON ESISTE}$	$\sqrt{+64} = \begin{cases} +8 \\ -8 \end{cases}$
$\sqrt{-144} = \text{NON ESISTE}$	$\sqrt{+400} = +20$	$\sqrt{+121} = \begin{cases} +11 \\ -11 \end{cases}$
$\sqrt{+3600} = \begin{cases} +60 \\ -60 \end{cases}$	$\sqrt{+144} = \begin{cases} +12 \\ -12 \end{cases}$	$\sqrt{-81} = \text{NON ESISTE}$
$\sqrt{+1600} = \begin{cases} +40 \\ -40 \end{cases}$	$\sqrt{+10.000} = \begin{cases} +100 \\ -100 \end{cases}$	$\sqrt{+625} = \begin{cases} +25 \\ -25 \end{cases}$