



تأسيس حساب

١. القوى الاسية

$10 = \underline{10}^{+1}$	$0.1 = \underline{10}^{-1}$
$100 = \underline{10}^{+2}$	$0.01 = \underline{10}^{-2}$
$1000 = \underline{10}^{+3}$	$0.001 = \underline{10}^{-3}$
$10000 = \underline{10}^{+4}$	$0.0001 = \underline{10}^{-4}$

٢. العمليات على القوى

الأسس السالبة

$$\begin{aligned} 10 (=10^{+1}) &\square \times \underline{10}^{-2} = 10^{(+1) + (-2)} = 10^{-1} \\ 100 (=10^{+2}) &\square \times \underline{10}^{-3} = 10^{(+2) + (-3)} = 10^{-1} \\ 1000 (=10^{+3}) &\square \times \underline{10}^{-4} = 10^{(+3) + (-4)} = 10^{-1} \end{aligned}$$

الأسس الموجبة

$$\begin{aligned} 10 (=10^{+1}) &\times \underline{10}^{+2} = 10^{(+1) + (+2)} = 10^{+3} \\ 100 (=10^{+2}) &\times \underline{10}^{+3} = 10^{(+2) + (+3)} = 10^{+5} \\ 1000 (=10^{+3}) &\times \underline{10}^{+4} = 10^{(+3) + (+4)} = 10^{+7} \end{aligned}$$

الأسس السالبة

$$\begin{aligned} 0.1 (=10^{-1}) &\square \times \underline{10}^{-3} = 10^{(-1) + (-3)} = 10^{-4} \\ 0.01 (=10^{-2}) &\square \times \underline{10}^{-5} = 10^{(-2) + (-5)} = 10^{-7} \\ 0.00001 (=10^{-5}) &\square \times \underline{10}^{-1} = 10^{(-5) + (-1)} = 10^{-6} \end{aligned}$$

الأسس الموجبة

$$\begin{aligned} 0.1 (=10^{-1}) &\times \underline{10}^{+3} = 10^{(-1) + (+3)} = 10^{+2} \\ 0.01 (=10^{-2}) &\times \underline{10}^{+5} = 10^{(-2) + (+5)} = 10^{+3} \\ 0.0001 (=10^{-4}) &\times \underline{10}^{+6} = 10^{(-4) + (+6)} = 10^{+2} \\ 0.0001 (=10^{-4}) &\times \underline{10}^{+4} = 10^{(-4) + (+4)} = 10^0 = 1 \end{aligned}$$

