

Rekenregels voor machten en logaritmen

Machten	Logaritmen
M1 $a^0 = 1$	L0 ${}^a \log(b) + {}^a \log(c) = {}^a \log(b \cdot c)$ ${}^a \log(b) - {}^a \log(c) = {}^a \log\left(\frac{b}{c}\right)$
M2 $a^1 = a$	L1 ${}^a \log(b) = c \Rightarrow a^c = b$ $(a > 0 \wedge a \neq 1 \wedge b > 0)$
M3 $a^p \cdot a^q = a^{p+q}$	L2 ${}^a \log(b) = \frac{\log(b)}{\log(a)}$ (zie *)
M4 $a^p : a^q = a^{p-q}$	L3 ${}^a \log(b^p) = p \cdot {}^a \log(b)$
M5 $(a^p)^q = a^{p \cdot q}$	L4 $a^{{}^a \log(b)} = b$
M6 $(a \cdot b)^p = a^p \cdot b^p$	*) L2 uitgebreid ${}^a \log(b) = \frac{{}^g \log(b)}{{}^g \log(a)}$ $(g > 0)$
M7 $a^{-p} = \frac{1}{a^p}$	
M8 $a^{\frac{1}{2}} = \sqrt{a}$ $(a \geq 0)$	
M9 $a^{\frac{p}{q}} = \sqrt[q]{a^p}$ $(a \geq 0)$	© 2016 WisFaq.nl