

แบบฝึกหัด 1

เขียนจำนวนในรูปลอการิทึม (จับคู่คำตอบ)

ตัวอย่าง $2^5 = 32 \Rightarrow \log_2 32 = 5$ $2^{-5} = \frac{1}{32} \Rightarrow \log_2 \left(\frac{1}{32}\right) = -5$ $\left(\frac{1}{2}\right)^{-5} = 32 \Rightarrow \log_{\frac{1}{2}} 32 = -5$

$\left(\frac{1}{2}\right)^5 = \frac{1}{32} \Rightarrow \log_{\frac{1}{2}} \left(\frac{1}{32}\right) = 5$ $(\sqrt{2})^3 = \sqrt{8} \Rightarrow \log_{\sqrt{2}} \sqrt{8} = 3$ $(\sqrt{2})^6 = 8 \Rightarrow \log_{\sqrt{2}} 8 = 6$

$\log_{\sqrt{2}} \sqrt{8} = 3$ $\log_4 1024 = 5$ $\log_{2\sqrt{2}} \sqrt{8} = 2$ $\log_{3\sqrt{2}} 54\sqrt{2} = 3$

$\log_{\frac{1}{3}} 27 = -4$ $\log_6 \left(\frac{1}{216}\right) = -3$ $\log_2 \left(\frac{1}{8}\right) = -3$ $\log_2 8 = 3$

$\log_{\frac{2}{3}} \frac{4}{9} = 2$ $\log_a y = 3$ $\log_{0.25} 0.0625 = -2$ $\log_2 y = x$

$2^3 = 8$		$6^{-3} = \frac{1}{216}$	
$2^{-3} = \frac{1}{8}$		$4^5 = 1024$	
$(\sqrt{2})^3 = \sqrt{8}$		$(2\sqrt{2})^2 = 8$	
$\left(\frac{1}{3}\right)^{-4} = 81$		$(3\sqrt{2})^3 = 54\sqrt{2}$	
$\left(\frac{2}{3}\right)^2 = \frac{4}{9}$		$a^3 = y$	
$(0.25)^{-2} = 0.0625$; $0.25 = \frac{25}{100}$		$2^x = y$	

$$\log_{10} 10 = 1 \quad \log_a 1 = 0 \quad \log_{0.1} 0.001 = 4 \quad \log_{\frac{5}{2}} \left(\frac{8}{125} \right) = -3$$

$$\log_{2a} 4a^2 = 2 \quad \log_{10} 1000 = 3 \quad \log_9 9 = 1 \quad \log_7 49 = 2$$

$10^3 = 1000$		$10^0 = 1$	
$(0.1)^4 = 0.0001$		$a^0 = 1$	
$(7)^2 = 49$		$9^1 = 9$	
$\left(\frac{5}{2}\right)^{-3} = \frac{8}{125}$		$(2a)^2 = 4a^2$	