Rewrite into logarithmic form.

eg.	$2^3 = 8$	➡	$\log_2 8 = 3$
[a]	$5^4 = 625$	➡	
[b]	$3^6 = 729$	➡	
[c]	$2^{-5} = \frac{1}{32}$	➡	
[d]	$49^{\frac{1}{2}} = 7$	➡	
[e]	$9^x = y + 2$	➡	

Rewrite into exponential form.

eg.	$\log_{10} 100 = 2$	➡	$10^2 = 100$
[f]	$\log_4 1024 = 5$	➡	
[g]	$\log_3 81 = 4$	➡	
[h]	$\log_{343} 7 = \frac{1}{3}$	➡	
[i]	$\log_2 \frac{1}{64} = -6$	➡	
[j]	$\log_x (y^2 - 1) = 2$	➡	

Evaluate the logarithms by first rewriting in exponential form and finding the missing exponent.
<u>You may use your calculator to check multiplication, but do NOT use the log button.</u>

eg. Find $\log_6 216$ ➡ Find the power of 6 that gives 216
➡ $6^? = 216$
➡ $6^3 = 216$
➡ $\log_6 216 = 3$

[k] Find $\log_2 64$

[l] Find $\log_3 27$

[m] Find $\log_4 \frac{1}{16}$

[n] Find $\log_{81} 9$

[o] Find $\log_5 125$

[p] Find $\log_2 \frac{1}{8}$

[q] Find $\log_3 0$

[r] Find $\log_{64} 4$

[s] Find $\log_{10} 10{,}000{,}000{,}000$

[t] Find $\log_{29} 1$

[u] Find $\log_5 (-25)$

[v] Find $\log_{10} \frac{1}{100{,}000}$