



Logarithms - Product Property - To Sum



1 Convert the given logarithm to its equivalent based on the product property log ₃ 45	$\begin{array}{c c} A & B \\ log_59 + log_53 \\ C & D \\ log_38 + log_313 \\ log_39 + log \end{array}$	product property	$\begin{bmatrix} A & B \\ log_9 \ 11 + log_9 \ 7 \ log_9 \ 12 + log_9 \ 8 \\ \\ C & D \\ log_9 \ 11 + log_9 \ 6 \ log_9 \ 11 + log_9 \ 8 \\ \\ E \\ log_9 \ 4 + log_9 \ 9 \\ \end{bmatrix}$
3 Convert the given logarithm to its equivalent based on the product property log7 32	A B $\log_8 4 + \log_8 7 \log_4 8 + \log_8 7 \log_4 8 + \log_8 7 \log_8 \log_8 7 \log_8 \log_8 \log_8 7 \log_8 \log_8 \log_8 \log_8 \log_8 \log_8 \log_8 \log_8 \log_8 \log_8$	product property	A B $\log_5 4 + \log_5 2 \log_5 4 + \log_5 8$ C D $\log_2 4 + \log_2 5 \log_5 4 + \log_5 7$
5 Convert the given logarithm to its equivalent based on the product property log 7 15	A B $\log_7 5 + \log_7 9 \log_5 7 + \log_7 6$ C D $\log_7 7 + \log_7 9 \log_7 5 + \log_7 6$ E $\log_3 5 + \log_3 7$	product property	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
7 Convert the given logarithm to its equivalent based on the product property log6 18	$\begin{bmatrix} A & B \\ log_6 \ 6 + log_6 \ 3 \\ C \\ log_6 \ 3 + log_6 \ 6 \end{bmatrix}$	8 Convert the given logarithm to its equivalent based on the product property log4 80	$ \begin{array}{ c c c c c } \hline A & & B \\ \hline \log_4 10 + \log_4 12 & \log_4 10 + \log_4 8 \\ \hline C & D \\ \hline \log_{10} 8 + \log_{10} 4 & \log_{10} 4 + \log_{10} 8 \\ \hline \end{array} $