

Pre-Calculus

Rewrite a logarithm expression into expanded form.

1. $\log a^3 b^6 c^4$

2. $\log a^5 b c^2$

3. $\log \frac{a^4 b^2}{c^5}$

4. $\log \frac{a^4 c^7}{b^8}$

5. $\log \frac{a^2}{b^3 c^3}$

6. $\ln \frac{c^4}{a^7 b^6}$

7. $\ln \frac{1}{a^7 b c^8}$

8. $\ln \frac{1}{a b^4 c^6}$

9. $\ln \frac{a^7 c^3}{b^5 d}$

10. $\ln \frac{c^2 d^8}{a^6 b^7}$