

7.3 Rules of Logarithms

1. $4 \log_2 x + 2 \log_2 y$

2. $\frac{1}{2} (\log x + 3 \log y)$

3. $-4 \log x$

4. $2 \ln x + \ln y - 4 \ln z$

5. $\log \frac{xy}{z}$

6. $\log \frac{x^4}{y^7}$

7. $\log \sqrt[3]{xy^2}$

8. $\log \frac{\sqrt{x}}{y}$