

# Answer Key

## Practice B

- $\log 3 - \log 4 \approx -0.125$
- $\log 3 + \log 4 \approx 1.079$
- $2 \log 3 \approx 0.954$
- $2 \log 4 \approx 1.204$
- $-\log 4 \approx -0.602$
- $\log 4 - 3 \log 3 \approx -0.829$
- $\log_6 3 + \log_6 x$
- $\log_2 x - \log_2 5$
- $\log x + 2 \log y$
- $\log_4 x + \log_4 y - \log_4 3$
- $\frac{1}{2} \log_3 x + \log_3 y + \log_3 z$
- $\log_5 2 + \frac{1}{2} \log_5 x$
- $2 \log x - \log 4$
- $1 - \frac{1}{2} \log x$
- $2 \log_2 x + \log_2 y - \log_2 z$
- $\log_3 \left(\frac{z}{x}\right)$
- $\log_5 3x^2$
- $\log_4 5xy$
- $\log \frac{\sqrt{x}}{4}$
- $\log_2 \frac{\sqrt[3]{x^2}}{y^3}$
- $\log_3 \left(\frac{4x^2}{5}\right)$
- $\frac{\log 12}{\log 3} = \frac{\ln 12}{\ln 3} \approx 2.262$
- $\frac{\log 2}{\log 6} = \frac{\ln 2}{\ln 6} \approx 0.387$
- $\frac{\log 0.5}{\log 4} = \frac{\ln 0.5}{\ln 4} = -0.5$
- $\frac{\log 12}{\log 0.8} = \frac{\ln 12}{\ln 0.8} \approx -11.136$
- $\frac{\log 2.8}{\log 1.5} = \frac{\ln 2.8}{\ln 1.5} \approx 2.539$
- $\frac{\log 6}{\log \frac{1}{2}} = \frac{\ln 6}{\ln \frac{1}{2}} \approx -2.585$
- $\text{pH} = 6.1 + \log B - \log C$
- $\approx 7.2$
- below normal
- $\text{pH} = 7.48 - \log C$
- 1.2

