

3.4 HOMEWORK QUIZ – Properties of Logarithmic Functions

Date: _____ Form A

Name _____

Questions 1 – 3: Use properties of logarithms to write the expression as a sum or difference.

1. $\log 9x$

2. $\log \frac{x^3}{y}$

3. $\ln \frac{x^4 \sqrt{y}}{z^3}$

Questions 4 – 6: Use properties of logarithms to write the expression as a single logarithm.

4. $\frac{1}{4} \ln x - 3 \ln y$

5. $\log m - 2 \log n + \log p$

6. $3 \ln x + \ln(x - 2) - 5 \ln y$

Grade: _____

3.4 HOMEWORK QUIZ – Properties of Logarithmic Functions

Date: _____ Form B

Name _____

Questions 1 – 3: Use properties of logarithms to write the expression as a sum or difference.

1. $\log 25x$

2. $\log \frac{m}{n^2}$

3. $\ln \frac{xy^3}{\sqrt{z}}$

Questions 4 – 6: Use properties of logarithms to write the expression as a single logarithm.

4. $5 \ln x - \frac{1}{2} \ln y$

5. $3 \log m - \log n + 2 \log p$

6. $4 \ln x + \ln(x + 3) - 2 \ln y$

Grade: _____