SI Worksheet 11

Logarithms

Solve for Y.

1) $y = log_5 25$

2) $y = log_7 \frac{1}{7}$

Solve for X.

3) $ln(x) = -3$

4) $2log(x) = log(2) + log(3x - 4)$

Evaluate the expressions.

5) $log_3 1$

6) $log_4 4$

7) $log_7 7^3$

8) $2^{log_2 3}$

Expand the expressions.

9) $log(x^2 y)$

10) $log(\frac{\sqrt{x}\sqrt[3]{y^2}}{z^4})$

11) $log(\frac{x}{y})^2$

12) $log(\frac{\sqrt[3]{x}}{\sqrt[3]{y}})$

Find the inverses.

13) $f(x) = log_2(x - 3) - 5$

14) $f(x) = 2 \cdot 3^{3x} - 1$