K8Worksheets

Logarithmic Equations

Solve each logarithmic equation.

$\log_3 x^2 + \log_3 5 - \log_3 x = \log_3 15$

$x =$ _____

$\log_5(x^2 - 4) + \log_5 2 - \log_5(x - 2) = \log_5 8$

$x =$ _____

$\log_7 x + \log_7 3 - \log_7 5 = \log_7 2$

$x =$ _____

$\log_9 \frac{1}{4} + \log_9 6 - \log_9 3 = \log_9 x$

$x =$ _____