

## 18.4 – Solving Logarithms

Solve each logarithmic equation.

1.  $\log_3 20 = \log_3 4x$

2.  $\log_5(2x + 6) = \log_5 12$

3.  $\log_{10}(x - 7) = \log_{10} 15$

Sometimes we need to use properties of logarithms to help us solve the equation.

4.  $\log_5 6x - \log_5 3 = \log_5 2$

5.  $2 \log x = \log 16$