1. Solve the following equations:
   a. $\log_{36} x = \frac{3}{2}$

   b. $\log_{9} x = \frac{3}{2}$

   c. $\log_{16} x = \frac{5}{2}$

KeyConcept Property of Equality for Logarithmic Functions

Symbols	If b is a positive number other than 1, then $\log_b x = \log_b y$ if and only if $x = y$.
Example	If $\log_5 x = \log_5 8$, then $x = 8$. If $x = 8$, then $\log_5 x = \log_5 8$.

2. Solve the following and check solutions.
   a. $\log_2 (x^2 - 4) = \log_2 3x$

b. $\log_3 (x^2 - 5) = \log_3 2x$

c. $\ln(x^2 - 1) = \ln 3$