

3.4 Continued – Solving Equations involving $\log_a x$

Method for solving:
① First, see if the bases are the same so that you can use the one-to-one property
② Check if you can solve algebraically, without manipulating anything
③ If you can't do #1 or #2, write each side as an exponent, with the same base the logarithm has, using $a^{\log_a x} = x$

① When you can use the one-to-one-property:

② When you can't use one-to-one, but can solve algebraically

③ When you can't do #1 or #2, write each side as an exponent, with the same base the logarithm has, using $a^{\log_a x} = x$