

Formative Assessment #20 – Solving Logarithmic Equations

RF6.3: I can solve logarithmic equations and identify extraneous roots.

1. Solve the following logarithmic equations. *Round your answers to the nearest hundredth.*

a) $\log(4a + 7) = \log(5a + 5)$

b) $\ln(3z + 4) = 3.8286$

c) $\log_4(x + 3) - \log_4 x = 1$

d) $\ln(2x + 1) + \ln(2x - 1) = 0$

e) $\log_2(2 - 2x) + \log_2(1 - x) = 5$