

Algebra 2 Module 8 Lesson 7 – Solving Logarithmic Equations Using Tables and Graphs

3. Solve for x : $\log_3(x-10) + \log_3(x+2) = 4$

(A) No real solutions.	Incorrect. There are two solutions to this equation.
(B) -6.8, 14.8	Incorrect. You cannot simplify the log expression before solving graphically or with a table. It leads to extraneous solutions.
(C) 104.2	Incorrect. You used common logs instead of logs with base 3.
(D) 14.8	Correct. The graph below shows the solution. 