

SOLVE THE LOGARITHMIC EQUATION

Solve the equation

$$(\ln x)^2 - 2.5(\ln x)(\ln(4x - 5)) + (\ln(4x - 5))^2 = 0,$$

where x and all expressions in the equation are real.

RULES

- (1) You must be an undergraduate enrolled in classes at USC-Columbia.
- (2) Write your solutions clearly and show all of your work.
- (3) Staple all sheets together.
- (4) Bring your solutions to the math office (LC 411) and drop it in the box provided.
- (5) **Include your name and email address.**
- (6) Sign the drop-off sheet to record your submission.

Look for a new problem on the 15th of every month!