Solve the following logarithmic equations.

(1) $x^2 + 2x + 1 = 0$

(2) $2log(x-1) = log(x+1)$

(3) $log_5(x+1) + log_5(x-3) = 1$

(4) $log_2(x+1) = log_2(2-x) + 1$

(5) $(1 + log_2 x) \cdot log_2 x = 2$

(6) $(log_3 x)^2 - 5log_3 x + 6 = 0$

(7) $(log_2 x)^2 = log_2 x^2 + 3$

(8) $2log_2 x - 3log_x 2 + 5 = 0$