Challenge Problem 7

1. Solve for x:
$$\log_2 (x - 1) - \log_2 (x + 1) = -1/2.$$

   Check your solutions in the original equation to determine if they are valid.

2. Solve for x:
$$\frac{\log_2 (x - 1)}{\log_2 (x + 1)} = -1/2.$$

   Check your solutions in the original equation to determine if they are valid.