6.NS Batting Average

Task

Before a game, Jake's batting average was exactly 0.350. That is, the decimal expansion of the fraction

$$\frac{\text{number of hits}}{\text{times at bat}}$$

is equal to 0.350. During the game, Jake bats 4 times and get 2 hits. If Jake's batting average after the game is 0.359, how many times had Jake batted before the game? Explain.