Question:

John drives for 3 hours at a speed of 60 mph and then turns around because he realizes he forgot something very important at home. He tries to get home in 4 hours but spends the first 2 hours in standstill traffic. He spends the next half-hour driving at a speed of 30mph, before being able to drive the remaining time of the 4 hours going at 80 mph. How far is he from home at the end of those 4 hours?

Reasoning + Answer:

<think>John initially drives for 3 hours at 60 mph, meaning he is $3 * 60 = 180$ miles from home. He then tries to go home in a further 4 hours, of which he spends 2 in traffic so he can only go for $4 - 2 = 2$ hours. In the first 30 minutes he does this he drives $30 * .5 = 15$ miles. In the final 1.5 hours of trying to get home he drives $80 * 1.5 = 120$ miles Thus in total he covers $15 + 120 = 135$ miles in the next 4 hours. Originally he was 180 miles from home and drove to cover 135 miles closer, meaning he is now $180 - 135 = 45$ miles from home. </think>