Hickam Proof 5

5 point assignment - Due Friday

Name _____

I thought of this problem from a memory I had of when I was in 8th grade and my father had an in-ground pool put in at our house. I remember that once it was built, it took an awful long time to fill up with water. From this memory, I now have a new proof for you. Remember to write in complete sentences.

Assume that a swimming pool is 50 feet wide by 80 feet long with a consistent depth of 8 feet. In order to fill the pool with water, I will use a water hose that puts out 1 gallon of water every 9 seconds. How long will it take to fill the pool up with water knowing that $1 \text{ ft}^3 \approx 7.5$ gallons (rounded the number to make the problem easier for you – I am so nice!)? Give me the answer rounded to the nearest number of hours it will take to fill up the pool.