

Exercise 45

A driver of a car stopped at a gas station to fill up their gas tank. They looked at their watch, and the time read exactly 3:40 p.m. At this time, they started pumping gas into the tank. At exactly 3:44, the tank was full and they noticed that they had pumped 10.7 gallons. What is the average rate of flow of the gasoline into the gas tank?

Solution

The average rate of flow is the total volume of gas delivered divided by the time.

$$\frac{10.7}{4} \frac{\text{gal}}{\text{min}} \approx 2.68 \frac{\text{gal}}{\text{min}}$$