Michael has 50 gallons of $36 \%$ acid solution. If he adds 10 gallons of $100 \%$ acid solution, what is the percentage of acid in the final mixture?

Use the pictures to help visualize this problem. Pretend the acid in the solution settles to the bottom of the jars, leaving pure water above. How much pure acid is in each jar?

## 50 gallons of $36 \%$ acid solution <br> 

Now, picture pouring each jar into this larger jar. Then let that pure acid settle in your mind to the bottom.

How many gallons of pure acid did you pour in? How many total gallons of solution did you pour in?

Divide (part / whole) to find the percentage of acid in the final mixture. Write your answer as a sentence.

Final Mixture


