Answer on Question #67771 – Math – Algebra

Question

A baker filled a measuring cup with 3/4 cup of water, he poured 1/2 of the water in a batter, then spilled 1/8 cup of water on floor. how much water will the baker need to add to what is left in the cup to have 50% more that he started with?

Solution

First we calculate how much water should be in the glass at the end.

$$\frac{3}{4} \cdot \frac{15}{10} = \frac{45}{40} = \frac{9}{8}$$

As baker poured 1/2 of the water in a batter he has left

$$\frac{3}{4} - \left(\frac{3}{4} \cdot \frac{1}{2}\right) = \frac{3}{8}$$

in a cup.

Then he spilled 1/8 cup of water on floor, so the amount of water he left was

$$\frac{3}{8} - \frac{1}{8} = \frac{2}{8}$$

Amount of water needed to add is

$$\frac{9}{8} - \frac{2}{8} = \frac{7}{8}$$

Answer: $\frac{7}{8}$.