A chef was preparing meatballs. He used a combination of  $4\frac{1}{3}$  pounds of ground beef,  $2\frac{5}{6}$  pounds of ground pork, and  $1\frac{1}{12}$  pounds of ground veal. What was the total amount of ground meat in the mixture?

The answer should be written as a proper mixed number and should be simplified, if possible.