Problem of the Week Problem E Red and Blue Chips

Jane and Fred each have their own collection of red and blue bingo chips. The ratio of the number of Jane's chips to the number of Fred's chips is 3:2. When they combine their chips, the ratio of the number of red chips to the number of blue chips is 7:3. For Jane's chips, the ratio of the number of red chips to the number of blue chips is 4:1.

What is the ratio of the number of red chips to the number of blue chips for Fred's bingo chips?

