

Troubleshooting Solutions

Find the error and correct it!

Logan's class is learning to create common denominators for adding fractions. Her instructor works at the whiteboard and explains how to create a least common denominator for two fractions with uncommon denominators. Logan is taking great notes and following along with what her instructor is doing. The next problem the instructor models is $\frac{3}{14} + \frac{4}{21}$. She explains that 7 is a factor in each denominator and she multiplies the first fraction by $\frac{3}{3}$ and the second fraction by $\frac{2}{2}$ to get $\frac{9}{42} + \frac{8}{42} = \frac{17}{42}$. Logan sees what her instructor did and thinks it looks simple. "I'm set for my homework, no sweat!" Later that night, she encounters the following two problems in her homework:

4. $\frac{1}{3} + \frac{2}{5} =$

5. $\frac{4}{15} - \frac{2}{45} =$

She feels frustrated and confused. She says, "For problem 4, I can't find any common factors between the two denominators. In problem 5, I see that 5 is a common factor, but so is 3. Neither of these problems are like the problems worked in class today."

ERROR

CORRECTION