

Answers to Practice Exercises for Chapter 11 – The Four Rules for Rational Numbers

Set A - Question 10

Working

$$\begin{aligned} & \frac{3}{5} \times \frac{5}{12} \\ = & \frac{\cancel{3}^1}{5^1} \times \frac{1\cancel{5}}{4\cancel{12}} \\ = & \frac{1}{4} \end{aligned}$$

Comment

There are common factors of 3 and 5 between the numerators and denominators, so divide them out.

Now multiply the numerators, multiply the denominators.

If you don't divide out the common factors first, it goes like this:

$$\begin{aligned} & \frac{3}{5} \times \frac{5}{12} \\ = & \frac{15}{60} \\ = & \frac{1}{4} \end{aligned}$$

Multiply the numerators, multiply the denominators.

Now reduce to lowest terms. The common factor is 15, but you might do it in stages dividing by 5 and then by 3 (or the other way round).