

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

Set A - Question 11

Working

$$\begin{aligned} & \frac{9}{20} \times \frac{5}{24} \\ = & \frac{9 \cancel{3}}{\cancel{20} 4} \times \frac{1 \cancel{5}}{8 \cancel{24}} \\ = & \frac{3}{32} \end{aligned}$$

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:

$$\begin{aligned} & \frac{9}{20} \times \frac{5}{24} \\ = & \frac{45}{480} \\ = & \frac{3}{32} \end{aligned}$$

Multiply the numerators, multiply the denominators.

Now reduce to lowest terms. The common factor is 15, but you would probably do it in stages dividing by 5 to get $\frac{9}{96}$ and then by 3 (or the other way round).