

Maths Star

Multiplication of Fractions

Multiplication is the easiest fraction sum. You simply multiply the two numerators together, then multiply the two denominators together, then simplify!

$$\text{E.g. } \frac{1}{2} \times \frac{2}{3} = \frac{1 \times 2}{2 \times 3} = \frac{2}{6} = \frac{1}{3}$$

Sometimes, with bigger numbers it is easier to simplify some of the numbers before you start. You can cancel down 2 ways:

- Vertically: $\frac{1}{3} \times \frac{2}{6}$ → This cancels down to $\frac{1}{3}$
- Diagonally: $\frac{4}{5} \times \frac{1}{8}$ The 4 and 8 cancel down: $\frac{1}{5} \times \frac{1}{2}$

Try it yourself:

$$1) \frac{1}{5} \times \frac{2}{3} = \frac{1 \times 2}{5 \times 3} = \frac{2}{15}$$

$$2) \frac{2}{5} \times \frac{3}{8} = \frac{1}{5} \times \frac{3}{4} = \frac{1 \times 3}{5 \times 4} = \frac{3}{20}$$

$$3) \frac{5}{10} \times \frac{4}{7} = \frac{1}{2} \times \frac{4}{7} = \frac{1}{1} \times \frac{2}{7} = \frac{1 \times 2}{1 \times 7} = \frac{2}{7}$$

$$4) \frac{3}{4} \times \frac{4}{10} = \frac{3}{1} \times \frac{1}{10} = \frac{3 \times 1}{1 \times 10} = \frac{3}{10}$$

$$5) \frac{7}{18} \times \frac{6}{14} = \frac{1}{3} \times \frac{1}{2} = \frac{1 \times 1}{3 \times 2} = \frac{1}{6}$$