Multiplying fractions

Mana Maths

Te reo Māori terms

hautau
fraction
Open in Te Aka

tau whakarea
multiplication
Open in Te Aka

taurunga
numerator
Open in Te Aka

tauraro
denominator
Open in Te Aka

Foundation

1. $\frac{1}{2} \times \frac{1}{3}$.

2. $\frac{2}{3} \times \frac{1}{4}$.

3. $\frac{3}{5} \times \frac{1}{2}$.

4. $\frac{1}{4} \times \frac{2}{7}$.

5. $\frac{3}{4} \times \frac{2}{3}$.

6. $\frac{2}{5} \times \frac{3}{4}$.

7. $\frac{4}{5} \times \frac{1}{2}$.

8. $\frac{5}{6} \times \frac{2}{3}$.

9. $2 \times \frac{1}{5}$.

10. $3 \times \frac{2}{7}$.

11. $4 \times \frac{3}{8}$.

12. $5 \times \frac{1}{10}$.

13. $\frac{2}{9} \times \frac{3}{5}$.

14. $\frac{7}{8} \times \frac{2}{7}$.

15. $\frac{3}{10} \times \frac{5}{6}$.

16. $\frac{4}{9} \times \frac{3}{4}$.

Proficient

1. $\frac{4}{7} \times \frac{3}{5}$.

2. $\frac{5}{8} \times \frac{4}{9}$.

3. $\frac{7}{10} \times \frac{5}{6}$.

4. $\frac{9}{11} \times \frac{2}{3}$.

5. $6 \times \frac{5}{12}$.

6. $8 \times \frac{3}{16}$.

7. $\frac{3}{4} \times \frac{8}{9}$.

8. $\frac{5}{6} \times \frac{9}{10}$.

9. $\frac{7}{12} \times \frac{6}{7}$.

10. $\frac{11}{15} \times \frac{5}{22}$.

11. Fill in the blank: $\frac{2}{3} \times \frac{\square}{5} = \frac{8}{15}$.

12. Fill in the blank: $\frac{\square}{4} \times \frac{2}{3} = \frac{1}{2}$.

13. Is $\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$ correct?

14. Is $3 \times \frac{2}{9} = \frac{6}{9}$ correct?

15. Which is greater: $\frac{2}{3} \times \frac{3}{5}$ or $\frac{3}{4} \times \frac{2}{5}$?

16. $\frac{4}{15} \times \frac{5}{8}$.

17. $\frac{13}{14} \times \frac{7}{13}$.

18. Explain in one short sentence why multiplying by $\frac{1}{2}$ makes a positive number smaller.

Excellence

1. $1\frac{1}{2} \times \frac{2}{3}$.

2. $2\frac{1}{4} \times \frac{4}{9}$.

3. $\frac{5}{6} \times \frac{9}{20}$.

4. $\frac{7}{12} \times \frac{18}{21}$.

5. A student says $\frac{3}{4} \times \frac{2}{5} = \frac{5}{8}$. Are they correct? Explain.

6. A recipe uses $\frac{3}{4}$ of a cup of milk per batch. You make $\frac{2}{3}$ of a batch. How much milk is needed?

7. Find a fraction so that $\frac{3}{5} \times \square = \frac{9}{20}$.

8. Fill in both blanks: $\frac{\square}{6} \times \frac{3}{4} = \frac{5}{\square}$.

9. Which is greater: $\frac{5}{6} \times \frac{3}{10}$ or $\frac{2}{3} \times \frac{3}{8}$? Show enough working to justify.

10. Is $\frac{4}{9} \times \frac{3}{8} = \frac{12}{72} = \frac{1}{6}$ correct? Explain.

11. A strip is $\frac{5}{6}$ m long. You use $\frac{3}{5}$ of it. How many metres is that?

12. Complete: if $\frac{2}{7} \times \frac{m}{3} = \frac{4}{21}$, then $m = \_\_\_\_$.

13. Write $3 \times \frac{4}{15}$ as a single simplified fraction.

14. A tank is $\frac{7}{8}$ full and then $\frac{2}{3}$ of that water remains. What fraction of the whole tank remains?

15. Which does not belong: $\frac{1}{2} \times \frac{2}{3}$, $\frac{2}{3} \times \frac{1}{2}$, $\frac{3}{4} \times \frac{4}{9}$, $\frac{5}{6} \times \frac{1}{2}$?

16. Explain why $\frac{4}{5} \times \frac{3}{4}$ can be simplified before multiplying.