Multiplying Fractions

Remember, it's as simple as multiplying the numerators and denominators of the fractions together separately e.g. $\frac{1}{5} \times \frac{2}{3} = \frac{1\times2}{5\times3} = \frac{2}{15}$

Mild

1. $\frac{1}{2} \times \frac{1}{3}$
2. $\frac{1}{2} \times \frac{1}{2}$
3. $\frac{1}{3} \times \frac{1}{4}$
4. $\frac{2}{3} \times \frac{3}{4}$
5. $\frac{3}{7} \times \frac{4}{5}$
6. $\frac{1}{2} \times \frac{3}{19}$
7. $\frac{6}{7} \times \frac{5}{8}$
8. $\frac{2}{3} \times \frac{5}{7}$
9. $\frac{7}{8} \times \frac{5}{6}$
10. $\frac{8}{9} \times \frac{4}{8}$
11. $\frac{3}{8} \times \frac{3}{4}$
12. $\frac{4}{7} \times \frac{2}{9}$
13. $\frac{6}{7} \times \frac{3}{8}$
14. $\frac{5}{6} \times \frac{5}{7}$
15. $\frac{3}{10} \times \frac{3}{7}$

Spicy / Extra Spicy

These sets of questions involve mixed numbers and improper (top-heavy) fractions.

Mini-crash course!

Improper (Top-heavy) fractions have a numerator that is larger than (or equal to!) the denominator e.g. $\frac{5}{4}$ or $\frac{7}{3}$. Multiplication with improper fractions works in exactly the same way as shown before.

Mixed Numbers are made up of a whole number part and a fractional part e.g $2\frac{3}{4}$ or $1\frac{4}{5}$. in order to multiply mixed numbers, they need to be converted into improper fractions.

Example: $2\frac{3}{4} = \frac{11}{4}$ We have two whole lots of 4 which is $\frac{8}{4}$ and 3 portions of 4 which is $\frac{3}{4}$. Add them together and we get $\frac{11}{4}$.

Try these:

1. $1\frac{2}{3} \times 1\frac{1}{2}$
2. $1\frac{1}{4} \times 2\frac{1}{2}$
3. $3\frac{1}{4} \times 2\frac{1}{3}$
4. $1\frac{1}{4} \times 2\frac{1}{5}$
5. $4\frac{1}{4} \times \frac{1}{5}$
6. $3\frac{1}{7} \times \frac{1}{3}$
7. $1\frac{1}{2} \times 1\frac{4}{5}$
8. $1\frac{1}{2} \times 1\frac{1}{2}$

Dividing Fractions

Remember, it's as simple as flipping over the second fraction and performing a multiplication

e.g. $\frac{1}{3} \div \frac{3}{4} = \frac{1}{3} \times \frac{4}{3} = \frac{1\times4}{3\times3} = \frac{4}{9}$

Mild

1. $\frac{1}{4} \div \frac{1}{3}$
2. $\frac{4}{5} \div \frac{2}{10}$
3. $\frac{1}{2} \div \frac{2}{4}$
4. $\frac{3}{5} \div \frac{6}{10}$
5. $\frac{1}{4} \div \frac{4}{5}$
6. $\frac{1}{4} \div \frac{2}{3}$
7. $\frac{2}{3} \div \frac{3}{4}$
8. $\frac{1}{3} \div \frac{1}{2}$
9. $\frac{2}{4} \div \frac{9}{10}$
10. $\frac{3}{5} \div \frac{1}{10}$
11. $\frac{3}{4} \div \frac{8}{10}$
12. $\frac{1}{2} \div \frac{1}{5}$
13. $\frac{2}{5} \div \frac{1}{2}$
14. $\frac{1}{10} \div \frac{2}{3}$
15. $\frac{1}{2} \div \frac{6}{10}$

Spicy / Extra Spicy

These sets of questions involve mixed numbers and improper (top-heavy) fractions. You will need to convert the mixed numbers into improper fractions to perform the calculations.

Consult the mini-crash course on the previous page if you need any guidance.

1. $3\frac{1}{3} \div 2\frac{1}{2}$
2. $4\frac{1}{3} \div 4\frac{1}{4}$
3. $4\frac{4}{5} \div 2\frac{7}{10}$
4. $4\frac{2}{5} \div 4\frac{3}{4}$
5. $3\frac{3}{5} \div 2\frac{1}{2}$
6. $3\frac{9}{10} \div 2\frac{2}{3}$
7. $4\frac{1}{2} \div 4\frac{7}{10}$
8. $4\frac{1}{5} \div 4\frac{4}{5}$
9. $4\frac{1}{2} \div 4\frac{3}{4}$
10. $3\frac{3}{5} \div 4\frac{3}{4}$