Fractions – Lesson 9

In the last lesson you were shown two methods of adding fractions. Both have their advantages and disadvantages. You are free to use whichever method you feel most comfortable with.

Reminder

$\frac{1}{4}+\frac{2}{3}$

Method 1	Method 2
$\frac{1}{4}+\frac{2}{3}=\frac{3}{12}+\frac{8}{12}=\frac{11}{12}$ Turned both fractions into the equivalent fraction over 12 because 4 and 3 both go into 12 i.e. it is the lowest common multiple (LCM) of 4 and 3.	$\frac{1}{4}\times\frac{2}{3}=\frac{1\times3+2\times4}{4\times3}=\frac{3+8}{12}=\frac{11}{12}$ Kiss and smile method. Once you get used to it you may not need to write down the second stage.

Now try these examples: -

1) $\frac{1}{3}+\frac{1}{2}$ **2)** $\frac{1}{3}+\frac{2}{5}$ **3)** $\frac{2}{3}+\frac{1}{7}$ **4)** $\frac{1}{3}+\frac{2}{7}$ **5)** $\frac{2}{3}+\frac{2}{7}$

6) $\frac{1}{5}+\frac{3}{4}$ **7)** $\frac{2}{5}+\frac{1}{4}$ **8)** $\frac{3}{5}+\frac{1}{3}$ **9)** $\frac{4}{5}+\frac{1}{7}$ **10)** $\frac{3}{5}+\frac{2}{7}$

Sometimes it is necessary to simplify your answer but, with Method 1, this can often be avoided.

Example

$\frac{3}{8}+\frac{1}{2}$

Method 1	Method 2
$\frac{3}{8}+\frac{1}{2}=\frac{3}{8}+\frac{4}{8}=\frac{7}{8}$ Notice that 2 goes into 8 so we can use 8 on the bottom rather than 16. This means we don't need to simplify our answer	$\frac{3}{8}\times\frac{1}{2}=\frac{6+8}{8\times2}=\frac{14}{16}=\frac{7}{8}$ We need to remember to simplify our answer if we use this method.

Now try these examples. Make sure you have simplified your answer.

11) $\frac{1}{8}+\frac{3}{4}$ **12)** $\frac{1}{4}+\frac{5}{8}$ **13)** $\frac{1}{4}+\frac{1}{6}$ **14)** $\frac{3}{5}+\frac{1}{10}$ **15)** $\frac{1}{4}+\frac{3}{10}$

16) $\frac{1}{3}+\frac{2}{9}$ **17)** $\frac{1}{6}+\frac{2}{9}$ **18)** $\frac{5}{9}+\frac{1}{3}$ **19)** $\frac{1}{9}+\frac{2}{3}$ **20)** $\frac{5}{6}+\frac{1}{9}$