

## Adding fractions with mixed numbers

a.

$$\frac{3}{5} + 3\frac{3}{8}$$

Lcd 5 and 8 = 40

$$= \frac{3 \times 8}{5 \times 8} + 3\frac{3 \times 5}{8 \times 5}$$

$$= \frac{24}{40} + 3\frac{15}{40}$$

Now, the first fraction has no whole number at front so we get 3 as whole number for the answer. Add numerators to get the new numerator.

$$= 3\frac{39}{40}$$

b.

$$7\frac{2}{3} + \frac{3}{12}$$

Lcd=12

$$= 7\frac{2 \times 4}{3 \times 4} + \frac{3}{12}$$

$$= 7\frac{8}{12} + \frac{3}{12} = 7\frac{11}{12}$$

c.

$$2\frac{4}{9} + 4\frac{5}{12}$$

lcd of 9 & 12 is 36

$$= 2\frac{4 \times 4}{9 \times 4} + 4\frac{5 \times 3}{12 \times 3}$$

$$= 2\frac{16}{36} + 4\frac{15}{36}$$

2 + 4

$$= 6\frac{31}{36}$$

Add both whole numbers to get new whole number.

d.

$$5\frac{7}{24} + 3\frac{5}{6}$$

lcd of 24 & 6 is 24

$$= 5\frac{7}{24} + 3\frac{5 \times 4}{6 \times 4}$$

$$= 5\frac{7}{24} + 3\frac{20}{24}$$

$$= 8\frac{27}{24} 9$$

But 27 and 24 both can be divided by 3, (gcf of 27 & 24) to get 9 and 8 respectively.

$$= 8\frac{9}{8} = 9\frac{1}{8}$$

As  $\frac{9}{8} = 1\frac{1}{8}$

Now add 1 (which we got from 9/8) to 8, already at front to get 9 (new whole number at the front).