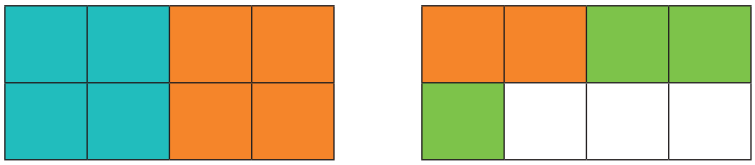
1) Rhys is adding fractions. Complete the calculation using his bar models to help.



a) $\frac{1}{\square} + \frac{3}{\square} + \frac{3}{\square} = \frac{\square}{8} = \square\frac{\square}{\square}$

Using Rhys' method, find the total of these fractions. Remember to use your knowledge to convert the improper fraction to a mixed number.

b) $\frac{1}{2} + \frac{1}{4} + \frac{5}{8} =$ _____

c) $\frac{2}{3} + \frac{3}{6} + \frac{7}{12} =$ _____

d) $\frac{1}{4} + \frac{5}{8} + \frac{9}{16} =$ _____

Match the calculation to the correct answer.

$\frac{2}{3} + \frac{5}{12} + \frac{5}{6}$	$1\frac{8}{12}$
$\frac{1}{2} + \frac{5}{12} + \frac{3}{4}$	$1\frac{11}{12}$
$\frac{1}{12} + \frac{1}{3} + \frac{3}{4}$	$1\frac{2}{12}$

1) True or false? Prove it!

a) $\frac{5}{8} + \frac{1}{4} + \frac{5}{16} = 1\frac{3}{16}$

b) $\frac{1}{2} + \frac{3}{7} + \frac{4}{14} = \frac{7}{23}$

c) $\frac{1}{3} + \frac{2}{5} + \frac{7}{15} = 1\frac{18}{15}$

d) $\frac{2}{6} + \frac{5}{12} + \frac{2}{3} = 1\frac{5}{12}$

If false, what mistake do you think has been made?

2) Using each fraction card only once, place all 6 fractions correctly to complete these 2 calculations.

$\frac{2}{3}$	$\frac{1}{3}$	$\frac{4}{6}$	$\frac{4}{12}$	$\frac{1}{2}$	$\frac{3}{4}$

$\square + \square + \square = 1\frac{5}{6}$

$\square + \square + \square = 1\frac{5}{12}$

1) Find 3 possible ways to complete the calculation.

$$\frac{1}{\square} + \frac{\square}{6} + \frac{4}{\square} = 1\frac{\square}{12}$$

Show your working here:

2) Jessie adds 3 fractions together.

Each of the 3 fractions has a different denominator.

The total of the 3 fractions is greater than 1 but less than 2.

The denominators are all factors of 8.

Each of the 3 fractions is less than 1 .

What could the calculation be? Find all possibilities.