Extra Challenge

Mon 8 Feb repeated from Fri 5 Feb

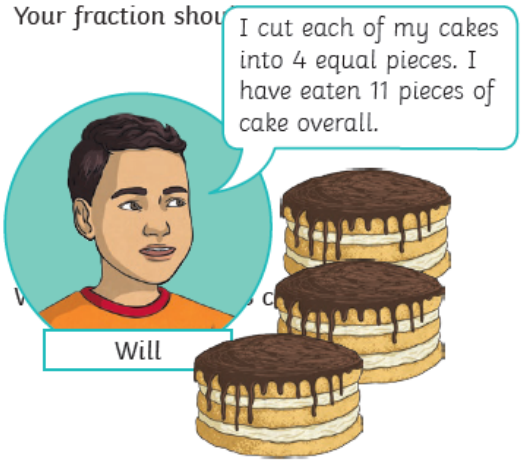
1) Fill in the missing numbers.

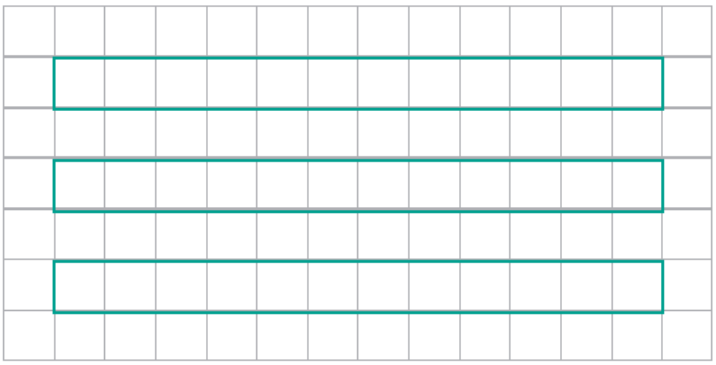
a) $\frac{\square}{12} < \frac{7}{6}$ (Your fraction should be greater than 1.)

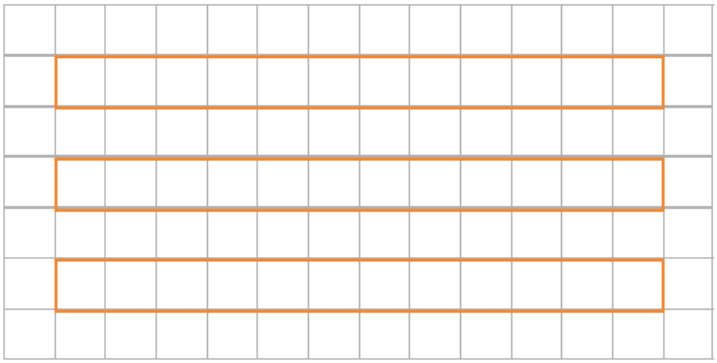
b) $\square\frac{3}{4} < \frac{16}{8}$

c) $\frac{26}{16} = 1\frac{5}{\square}$

2) Your fraction shou







Tues 9 Feb

1) $\frac{4}{5} + \frac{?}{5} < \frac{?}{5} + \frac{3}{5}$

Find 3 different ways to make this statement true. Each fraction in the statement must be less than 1.

2) $\frac{?}{6} + \frac{2}{6} < \frac{8}{6} - \frac{?}{6}$

Find all the possible ways to make this statement true.
Each fraction in the statement must be greater than 0.

Thur 10 Feb

1) Abbie is sorting her tin of marbles.

$\frac{2}{12}$ are green.

$\frac{1}{6}$ are blue.

$\frac{1}{3}$ are white.

The remainder of the marbles are red and yellow.

What fraction could be red and what fraction could be yellow? Find all the possibilities.

2) $\frac{4}{?} + \frac{?}{10} = \frac{8}{?}$

Find 3 possible solutions.

Fri 12 Feb

1) The answer is equal to or less than 1.

Find 3 possible ways to complete the calculation.

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

2) Jessie adds 3 fractions together.

Each of the 3 fractions has a different denominator.

The total is less than 1.

The denominators are all factors of 16.

Each of the 3 fractions is less than $\frac{1}{2}$.

What could the calculation be? Find all possibilities.

Challenge Answers:

Mon 8 Feb

1) a) $\frac{13}{12} < \frac{7}{6}$ b) $1\frac{3}{4} < \frac{16}{8}$ c) $\frac{26}{16} = 1\frac{5}{8}$

2) Will 

Lucy 

Will ate the most cake overall.

3) Accept any problems that compare fractions greater than 1.

Tues 9 Feb

1) There are six possible answers:

$\frac{4}{5}+\frac{0}{5}<\frac{2}{5}+\frac{3}{5}$

$\frac{4}{5}+\frac{0}{5}<\frac{3}{5}+\frac{3}{5}$

$\frac{4}{5}+\frac{0}{5}<\frac{4}{5}+\frac{3}{5}$

$\frac{4}{5}+\frac{1}{5}<\frac{3}{5}+\frac{3}{5}$

$\frac{4}{5}+\frac{1}{5}<\frac{4}{5}+\frac{3}{5}$

$\frac{4}{5}+\frac{2}{5}<\frac{4}{5}+\frac{3}{5}$

2) There are 10 possible solutions:

$\frac{1}{6}+\frac{2}{6}<\frac{8}{6}-\frac{1}{6}$

$\frac{1}{6}+\frac{2}{6}<\frac{8}{6}-\frac{2}{6}$

$\frac{1}{6}+\frac{2}{6}<\frac{8}{6}-\frac{3}{6}$

$\frac{1}{6}+\frac{2}{6}<\frac{8}{6}-\frac{4}{6}$

$\frac{2}{6}+\frac{2}{6}<\frac{8}{6}-\frac{1}{6}$

$\frac{2}{6}+\frac{2}{6}<\frac{8}{6}-\frac{2}{6}$

$\frac{2}{6}+\frac{2}{6}<\frac{8}{6}-\frac{3}{6}$

$\frac{3}{6}+\frac{2}{6}<\frac{8}{6}-\frac{1}{6}$

$\frac{3}{6}+\frac{2}{6}<\frac{8}{6}-\frac{2}{6}$

$\frac{4}{6}+\frac{2}{6}<\frac{8}{6}-\frac{1}{6}$

Thur 10 Feb

1) $\frac{2}{12}$ are green.

$\frac{1}{6}$ are blue, which is equivalent to $\frac{2}{12}$.

1/3 are white, which is equivalent to $\frac{4}{12}$.

$\frac{2}{12}+\frac{2}{12}+\frac{4}{12}=\frac{8}{12}$

This leaves $\frac{4}{12}$ which are red and yellow.

There are 3 possibilities:

Yellow	Red
$\frac{1}{12}$	$\frac{3}{12}$
$\frac{2}{12}$	$\frac{2}{12}$
$\frac{3}{12}$	$\frac{1}{12}$

2) Possible solutions:

$\frac{4}{20}+\frac{2}{10}=\frac{8}{20}$

$\frac{4}{10}+\frac{4}{10}=\frac{8}{10}$

$\frac{4}{20}+\frac{6}{10}=\frac{8}{10}$

$\frac{4}{40}+\frac{7}{10}=\frac{8}{10}$

$\frac{4}{5}+\frac{0}{10}=\frac{8}{10}$

Fri 12 Feb

1) Possible answers include the following:

$\frac{1}{12}+\frac{2}{6}+\frac{4}{12}=\frac{9}{12}$

$\frac{1}{6}+\frac{1}{6}+\frac{4}{12}=\frac{8}{12}$

$\frac{1}{3}+\frac{1}{6}+\frac{4}{12}=\frac{10}{12}$

2) There are 19 solutions:

$\frac{1}{4}+\frac{1}{8}+\frac{1}{16}=\frac{7}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{2}{16}=\frac{8}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{3}{16}=\frac{9}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{4}{16}=\frac{10}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{5}{16}=\frac{11}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{6}{16}=\frac{12}{16}$

$\frac{1}{4}+\frac{1}{8}+\frac{7}{16}=\frac{13}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{1}{16}=\frac{9}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{2}{16}=\frac{10}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{3}{16}=\frac{11}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{4}{16}=\frac{12}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{5}{16}=\frac{13}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{6}{16}=\frac{14}{16}$

$\frac{1}{4}+\frac{2}{8}+\frac{7}{16}=\frac{15}{16}$

$\frac{1}{4}+\frac{3}{8}+\frac{1}{16}=\frac{11}{16}$

$\frac{1}{4}+\frac{3}{8}+\frac{2}{16}=\frac{12}{16}$

$\frac{1}{4}+\frac{3}{8}+\frac{3}{16}=\frac{13}{16}$

$\frac{1}{4}+\frac{3}{8}+\frac{4}{16}=\frac{14}{16}$

$\frac{1}{4}+\frac{3}{8}+\frac{5}{16}=\frac{15}{16}$