Yr 4 Decimals and Fractions Unit 2 (4493)

Additional teacher instructions for practice sheets
These notes indicate which practice sheets are most appropriate for which groups.

Day 1 Fractions equivalent to $\frac{1}{2}$ and $\frac{1}{4}$ Sheet 1
Working towards ARE / Working at ARE / Greater Depth

Day 2 Equivalent fractions Sheet 1
Working towards ARE / Working at ARE / Greater Depth
Working at ARE to find 4 more pairs of equivalent fractions.
Greater Depth as for Working at ARE and complete the challenge.

Day 3 Adding and subtracting fractions Sheet 1
Working towards ARE / Working at ARE / Greater Depth
Working towards ARE complete at least the first four additions and subtractions.
Working at ARE complete all calculations.
Greater Depth should also attempt the challenge.

Fractions equivalent to $\frac{1}{2}$ and $\frac{1}{4}$
Sheet 1

Draw a circle round all the fractions which are equivalent to $\frac{1}{2}$.

Draw a square round all the fractions which are equivalent to $\frac{1}{4}$.

$$\frac{2}{4} \qquad \frac{3}{4} \qquad \frac{6}{12} \qquad \frac{5}{20}$$

$$\frac{20}{40} \qquad \frac{2}{8} \qquad \frac{4}{10} \qquad \frac{3}{12}$$

$$\frac{2}{6} \qquad \frac{8}{12} \qquad \frac{2}{5} \qquad \frac{3}{6}$$

$$\frac{4}{8} \qquad \frac{10}{40} \qquad \frac{9}{18}$$

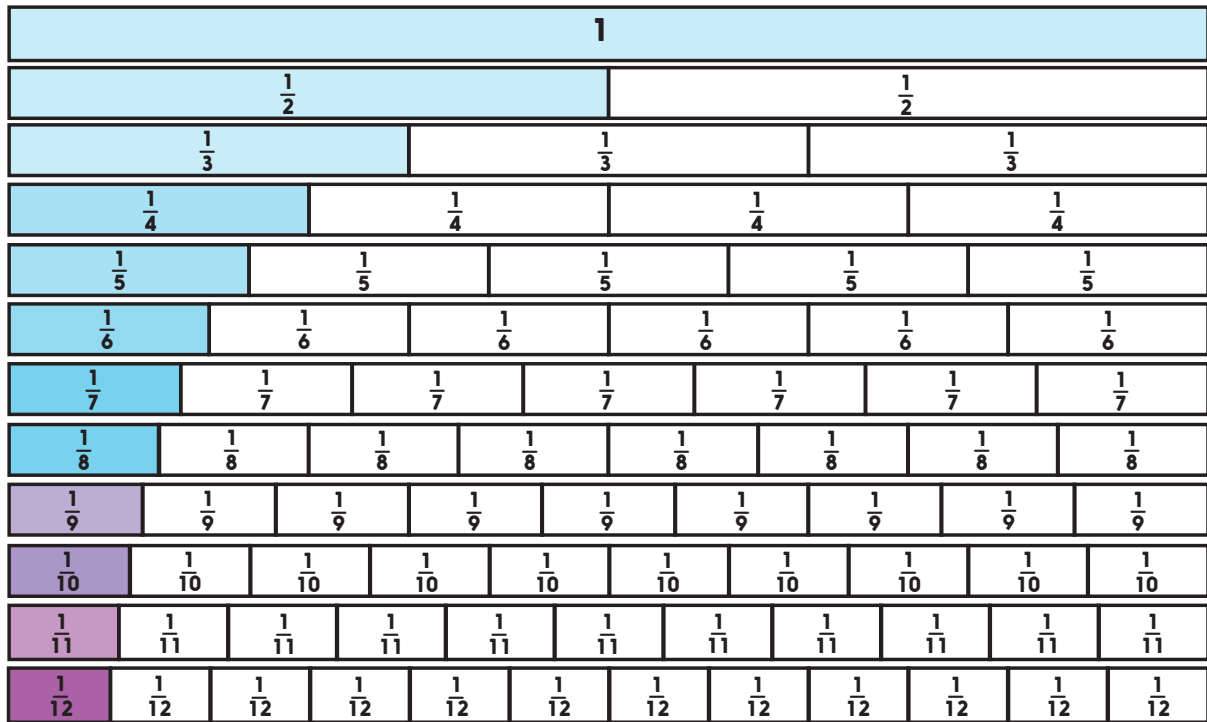$$\frac{8}{16} \qquad \frac{10}{20} \qquad \frac{2}{3} \qquad \frac{5}{10} \qquad \frac{4}{16}$$

Challenge

Write at least two more fractions equivalent to $\frac{1}{2}$ and two more equivalent to $\frac{1}{4}$.

Equivalent fractions
Sheet 1

Use the fraction wall to help you to write pairs of equivalent fractions.

1											

The fraction wall shows rows for $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, $\frac{1}{9}$, $\frac{1}{10}$, $\frac{1}{11}$, $\frac{1}{12}$.

$$\frac{2}{8} \equiv \frac{1}{\Box} \qquad \frac{6}{8} \equiv \frac{\Box}{4} \qquad \frac{3}{9} \equiv \frac{1}{\Box} \qquad \frac{6}{9} \equiv \frac{\Box}{3}$$

$$\frac{2}{12} \equiv \frac{1}{\Box} \qquad \frac{3}{12} \equiv \frac{1}{\Box} \qquad \frac{4}{12} \equiv \frac{1}{\Box} \qquad \frac{6}{12} \equiv \frac{1}{\Box}$$

$$\frac{4}{12} \equiv \frac{\Box}{6} \qquad \frac{10}{12} \equiv \frac{\Box}{6} \qquad \frac{8}{12} \equiv \frac{\Box}{3} \qquad \frac{9}{12} \equiv \frac{\Box}{4}$$
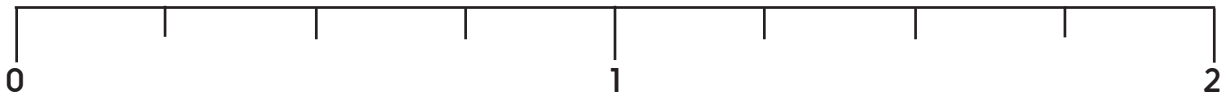
Challenge

How many more rows would we need to draw on the fraction wall to complete this pair of equivalent fractions: $\frac{5}{7} \equiv \frac{10}{\Box}$?

Adding and subtracting fractions
Sheet 1

Use fraction lines to help you work out the answers to these additions and subtractions.

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0                    1                    2
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```
0                    1                    2
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```
0                    1                    2
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$\frac{3}{4} + \frac{3}{4} =$

$\frac{3}{5} + \frac{2}{5} =$

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

$\frac{4}{5} + \frac{2}{5} =$

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

$\frac{5}{6} + \frac{2}{6} =$

$\frac{4}{5} + \frac{4}{5} =$

$\frac{2}{4} + 1\frac{3}{6} =$

$\frac{5}{6} - \frac{2}{6} =$

$\frac{4}{5} - \frac{2}{5} =$

$\frac{3}{4} - \frac{1}{4} =$

$1\frac{1}{5} - \frac{3}{5} =$

$1\frac{1}{4} - \frac{3}{4} =$

$1\frac{2}{6} - \frac{4}{6} =$

$1\frac{3}{6} - \frac{5}{6} =$

$1\frac{5}{6} - 1\frac{1}{2} =$

Challenge

Work with a partner to make up at least four new additions and subtractions.

practice_dec-frac_4493_day3

Decimals and fractions

Answers

Day 1 Fractions equivalent to $\frac{1}{2}$ and $\frac{1}{4}$ Sheet 1

$\boxed{}\frac{2}{4}$ $\frac{3}{4}$ $\frac{6}{12}$ $\frac{5}{20}$

$\frac{20}{40}$ $\frac{2}{8}$ $\frac{4}{10}$ $\frac{3}{12}$

$\frac{2}{6}$ $\frac{4}{10}$

$\frac{8}{12}$ $\frac{2}{5}$ $\frac{3}{6}$

$\frac{9}{18}$

$\frac{4}{8}$ $\frac{10}{40}$

$\frac{8}{16}$ $\frac{10}{20}$ $\frac{5}{10}$ $\frac{2}{3}$ $\frac{4}{16}$

Challenge

Other fractions equivalent to $\frac{1}{2}$ are $\frac{6}{12}$, $\frac{7}{14}$, $\frac{8}{16}$, $\frac{11}{22}$, etc.

Other fractions equivalent to $\frac{1}{4}$ are $\frac{6}{24}$, $\frac{7}{28}$, $\frac{8}{32}$, $\frac{9}{36}$, etc.

Day 2 Equivalent fractions Sheet 1

$\frac{2}{8} \equiv \frac{1}{4}$ $\frac{6}{8} \equiv \frac{3}{4}$ $\frac{3}{9} \equiv \frac{1}{3}$ $\frac{6}{9} \equiv \frac{2}{3}$

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

$\frac{4}{12} \equiv \frac{2}{6}$ $\frac{10}{12} \equiv \frac{5}{6}$ $\frac{8}{12} \equiv \frac{2}{3}$ $\frac{9}{12} \equiv \frac{3}{4}$

Challenge

We would need two more rows: $\frac{1}{13}$s and $\frac{1}{14}$s to give $\frac{5}{7} \equiv \frac{10}{14}$

Day 3 Adding and subtracting fractions Sheet 1

$\frac{3}{4} + \frac{3}{4} = 1\frac{1}{2}$ $\frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$

$\frac{3}{5} + \frac{2}{5} = 1$ $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$

$\frac{5}{6} + \frac{1}{6} = 1$ $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$

$\frac{4}{5} + \frac{2}{5} = 1\frac{1}{5}$ $1\frac{1}{5} - \frac{3}{5} = \frac{3}{5}$

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

$\frac{5}{6} + \frac{2}{6} = 1\frac{1}{6}$ $1\frac{2}{6} - \frac{4}{6} = \frac{4}{6} = \frac{2}{3}$

$\frac{4}{5} + \frac{4}{5} = 1\frac{3}{5}$ $1\frac{3}{6} - \frac{5}{6} = \frac{4}{6} = \frac{2}{3}$

$\frac{2}{4} + 1\frac{3}{6} = 2$ $1\frac{5}{6} - 1\frac{3}{6} = \frac{2}{6} = \frac{1}{3}$