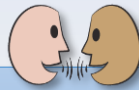


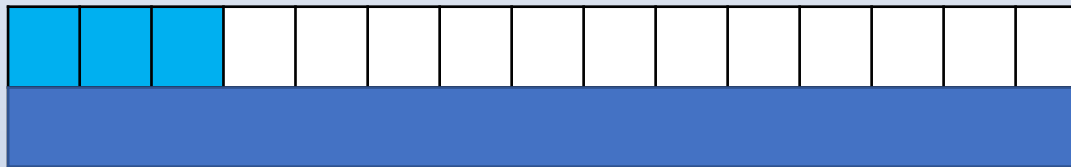
Compare fractions with different denominators using equivalence.



Which fractions with denominators less than 15 can be written as $\frac{1}{15}$ s?



$$\frac{1}{3} = \frac{5}{15}$$



$$\frac{1}{5} = \frac{3}{15}$$

$$\frac{5}{15} > \frac{3}{15}$$

So, $\frac{1}{3} > \frac{1}{5}$

Compare fractions with different denominators using equivalence.

But what if we don't have a fraction wall to help us compare fractions visually?

$$\frac{2}{3} \quad \frac{3}{5}$$

We can write these as the same 'sort' of fractions, i.e. **fractions with a common denominator**, in this case $\frac{1}{15}$ s, to compare them.



Have a go at writing both $\frac{2}{3}$ and $\frac{3}{5}$ as $\frac{1}{15}$ s, then write $>$ or $<$ to compare them.

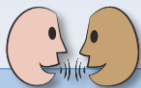
$$\frac{10}{15} > \frac{9}{15}$$

So, $\frac{2}{3} > \frac{3}{5}$

$$\frac{2}{3} = \frac{10}{15} \text{ (multiply both numerator and denominator by 5)}$$

$$\frac{3}{5} = \frac{9}{15} \text{ (multiply both numerator and denominator by 3)}$$

Compare fractions with different denominators using equivalence.



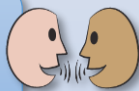
List which fractions with denominators less than 20 can be written as $\frac{1}{20}$ s.

$$\frac{1}{2}\text{s} \quad \frac{1}{4}\text{s} \quad \frac{1}{5}\text{s} \quad \frac{1}{10}\text{s}$$

Now use equivalence with $\frac{1}{10}$ s to compare $\frac{1}{2}$ and $\frac{3}{5}$, and equivalence with $\frac{1}{20}$ s to compare $\frac{7}{10}$ and $\frac{3}{4}$.

$$\frac{5}{10} < \frac{6}{10}, \text{ so } \frac{1}{2} < \frac{3}{5}$$
$$\frac{14}{20} < \frac{15}{20}, \text{ so } \frac{7}{10} < \frac{3}{4}$$

How can we compare $\frac{7}{5}$ and $\frac{5}{4}$?



Write the fractions as mixed numbers first, and then the fractional parts of each as $\frac{1}{20}$ s.

