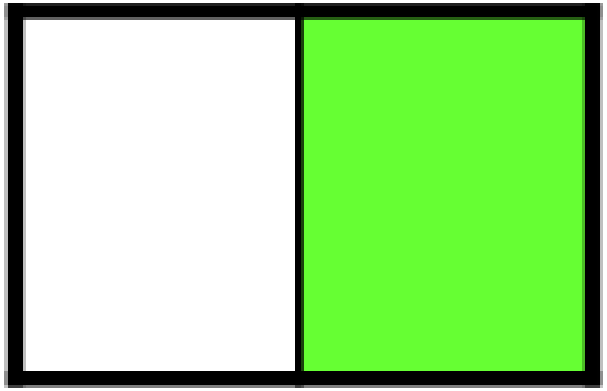
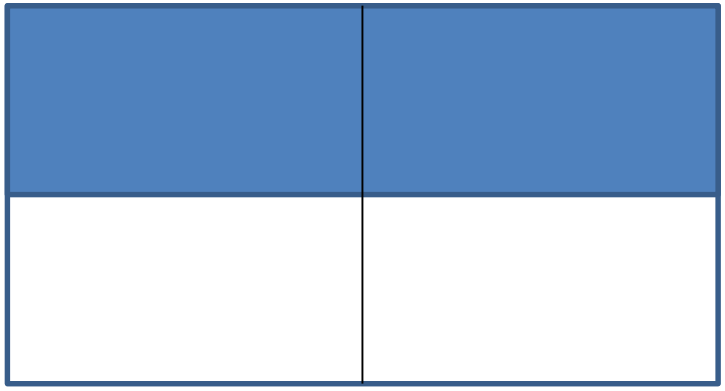
Equivalent fractions

Intelligent practice

What is the same? What is different?

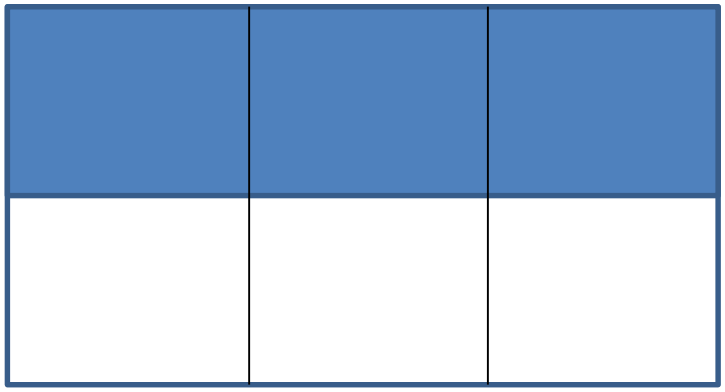




What fraction is shown? $\frac{1}{2}$

What fraction is shown now? $\frac{2}{4}$

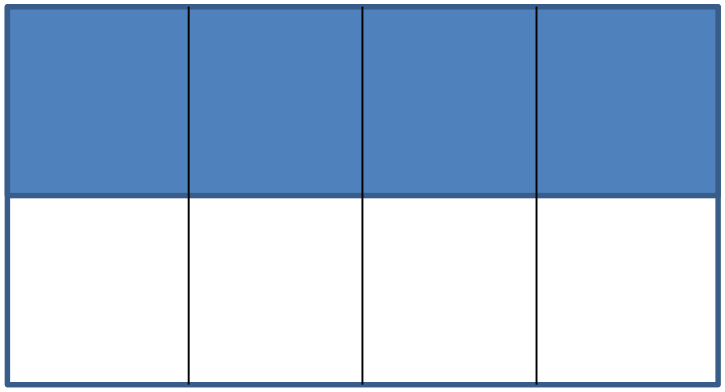
Can you complete this? $\frac{1}{2} =$



What fraction is shown? $\frac{1}{2}$

What fraction is shown now? $\frac{3}{6}$

Can you complete this? $\frac{1}{2} =$

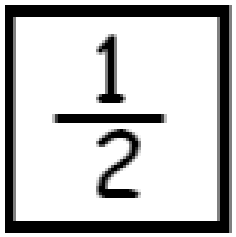


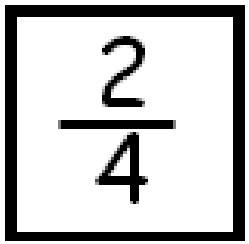
What fraction is shown? $\frac{1}{2}$

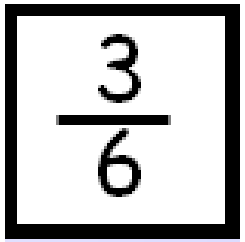
What fraction is shown now? $\frac{4}{8}$

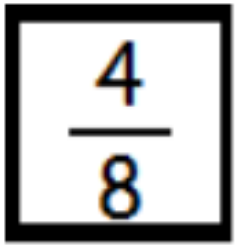
Can you complete this? $\frac{1}{2} = \square$

What do you notice?







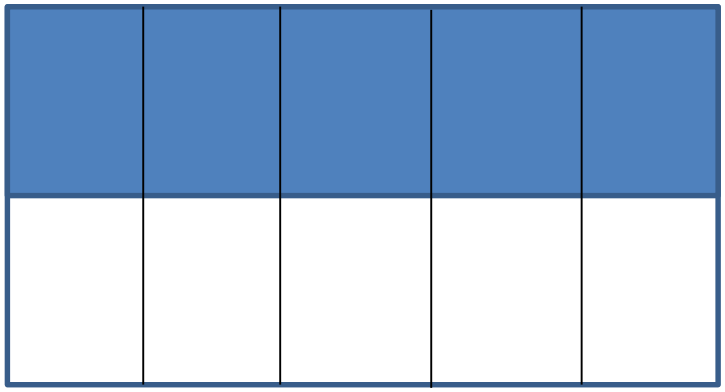


What is the same?

What is different?

What comes next in the sequence?

Why? How do you know?



What fraction is shown? $\frac{1}{2}$

What fraction is shown now? $\frac{5}{10}$

Can you complete this? $\frac{1}{2}$ =

What do you notice?

$$\boxed{\frac{1}{2}} = \boxed{\frac{2}{4}} = \boxed{\frac{3}{6}} = \boxed{\frac{4}{8}} = \boxed{\frac{5}{10}}$$

Can you explain the relationship between the numerator and the denominator?

Here is a sequence

$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10}$$

Which of the fractions below would NOT appear in this sequence? Why?

$\frac{8}{15}$

$\frac{3}{5}$

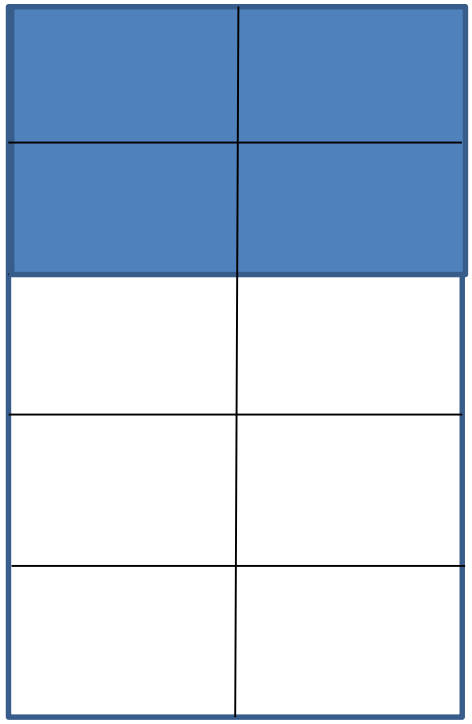
$\frac{70}{100}$

$\frac{6}{12}$

$\frac{10}{20}$

$\frac{24}{48}$

Here is another sequence



What fraction is shown?

$\frac{2}{5}$

What fraction is shown now?

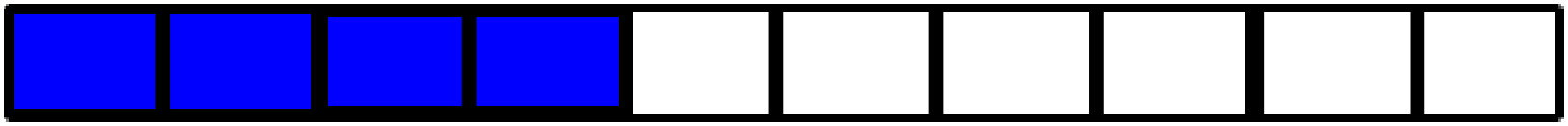
$\frac{4}{10}$

Can you complete this?

$\frac{2}{5}$ =

Can you continue the sequence?

$$\frac{2}{5} = \frac{4}{10}$$



Convince me

$$\frac{1}{5} = \frac{2}{10} = \frac{3}{15}$$

True or false?

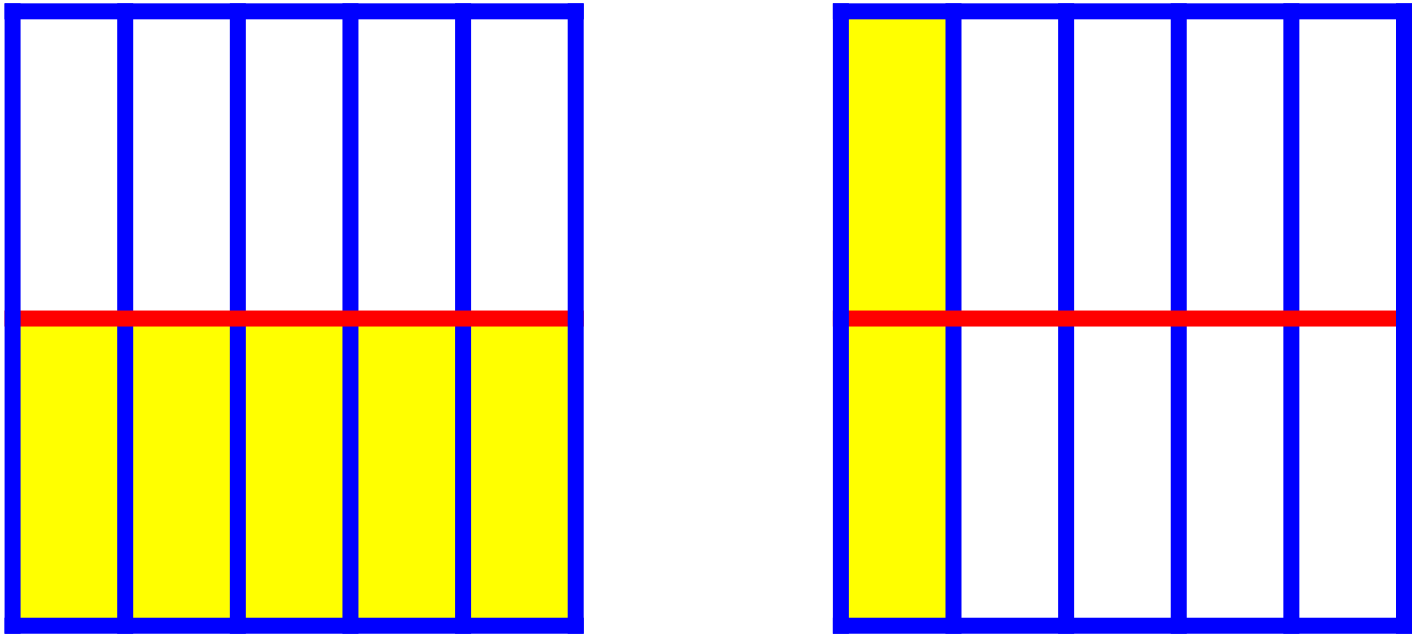
- $\frac{2}{3} = \frac{4}{6} = \frac{6}{9}$
- $\frac{3}{7} = \frac{6}{14} = \frac{9}{21}$
- $\frac{4}{5} = \frac{8}{15} = \frac{12}{25}$

Can you complete this sequence?

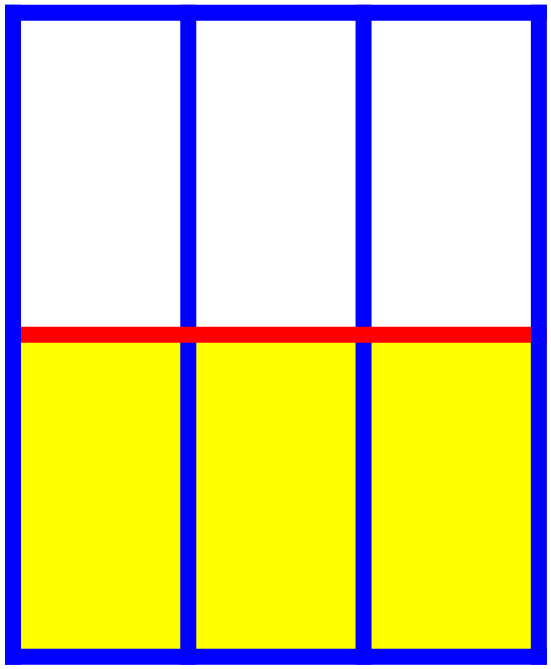
$$0 < \frac{\quad}{7} < \frac{\quad}{7} < \frac{\quad}{7} < \frac{\quad}{7} < 1$$

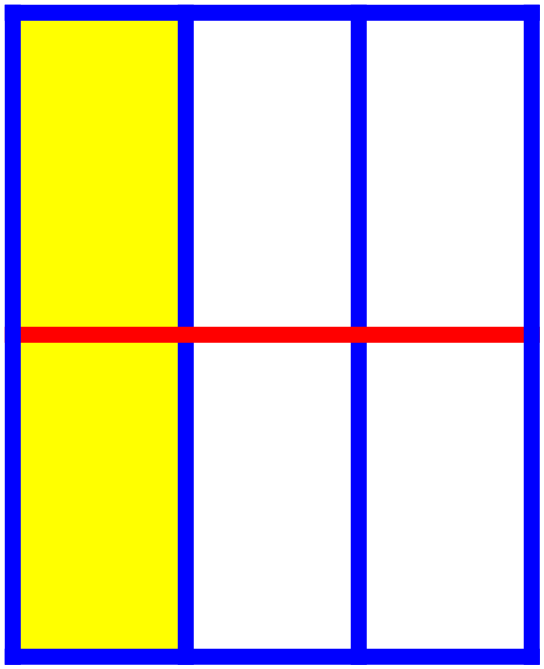
Now try this:

$$0 < \frac{\quad}{5} < \frac{\quad}{10} < \frac{\quad}{15} < \frac{\quad}{20} < 1$$

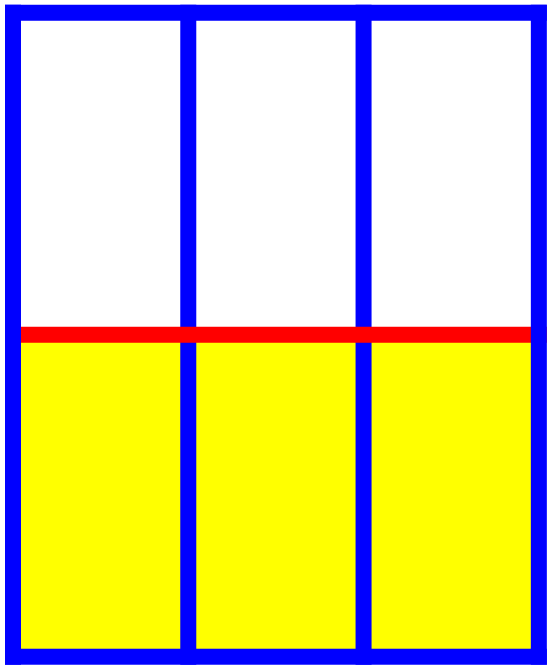


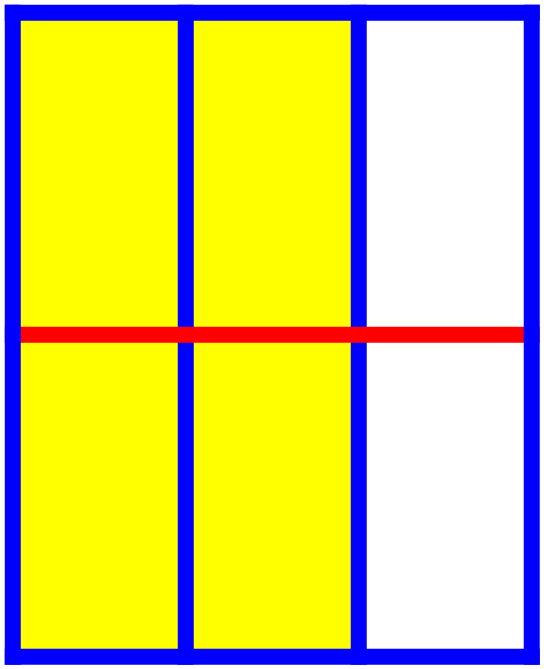
$$\frac{1}{2} + \frac{1}{5} = \frac{5}{10} + \frac{2}{10} = \frac{7}{10}$$



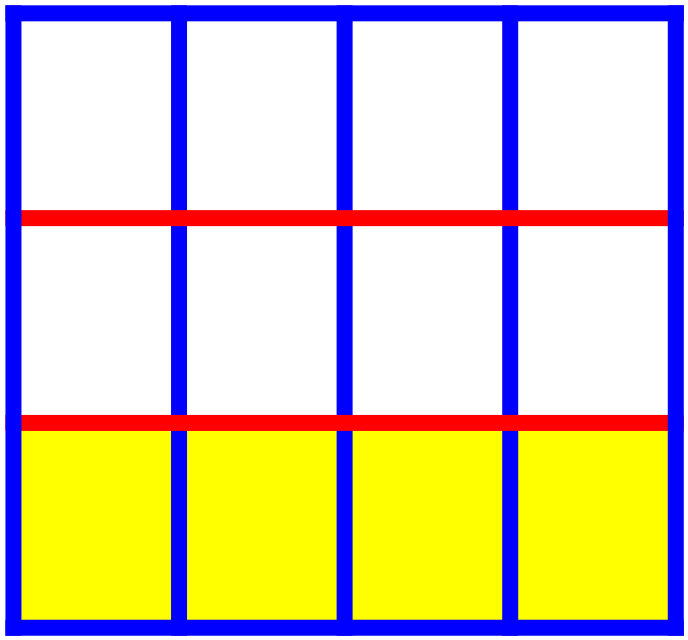


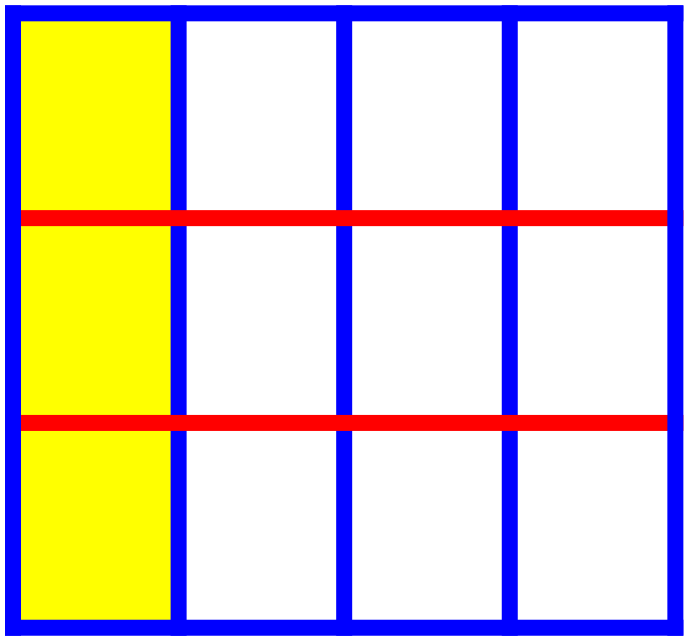
$$\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$



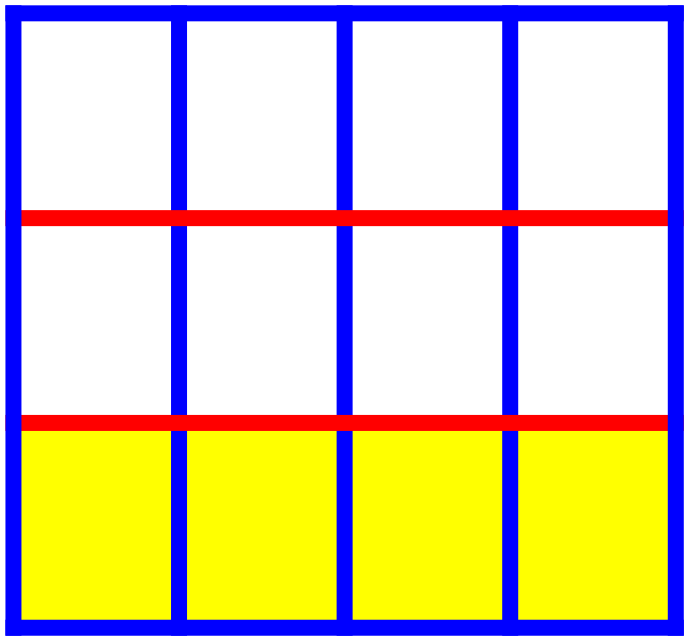


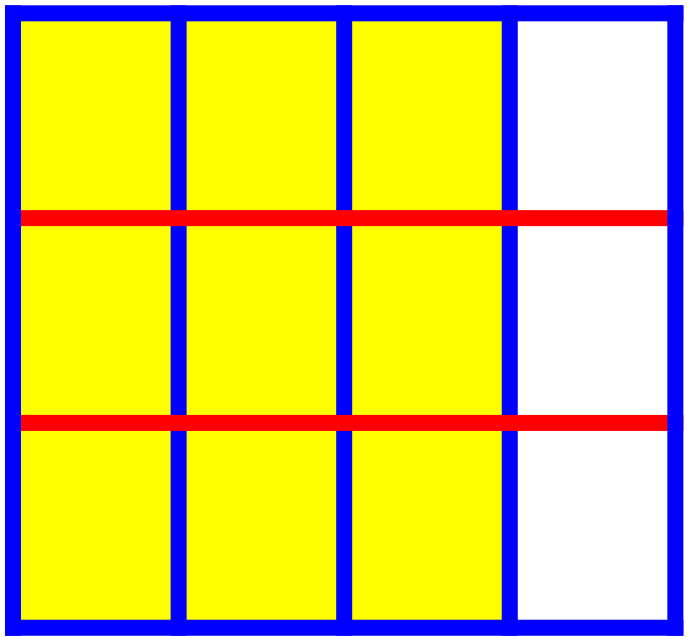
$$\frac{1}{2} + \frac{2}{3} = \frac{3}{6} + \frac{4}{6} = \frac{7}{6} = ?$$



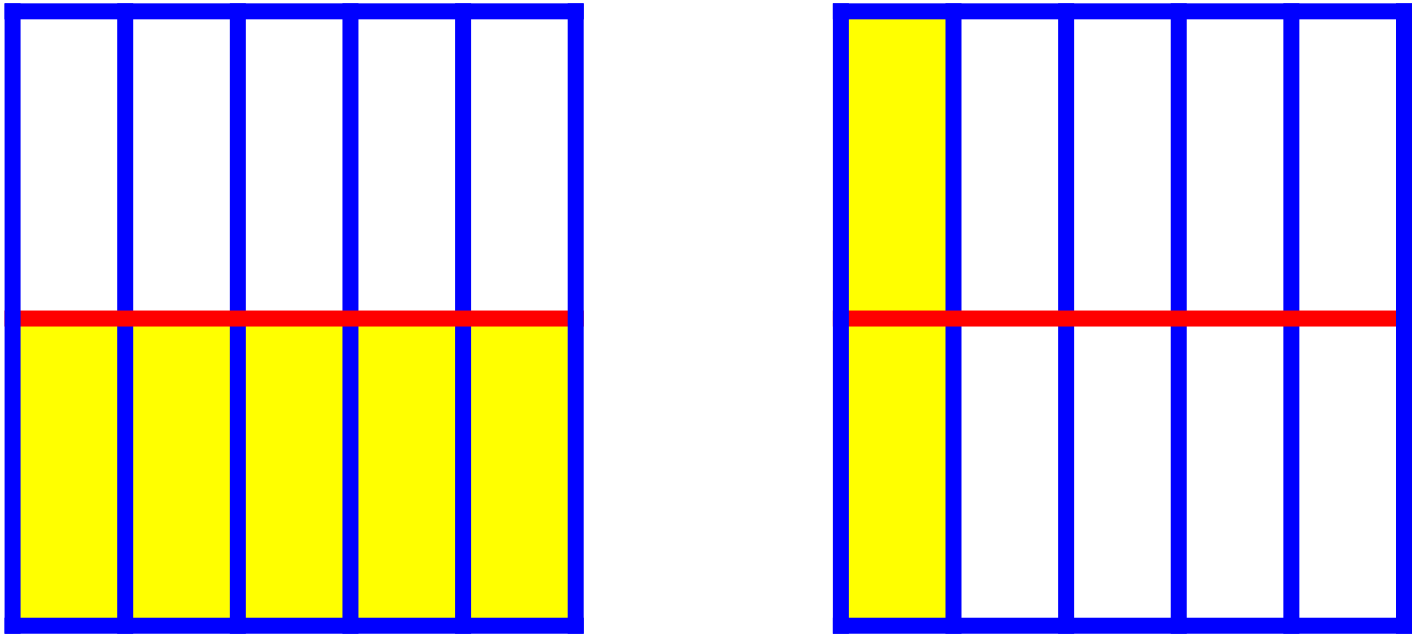


$$\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

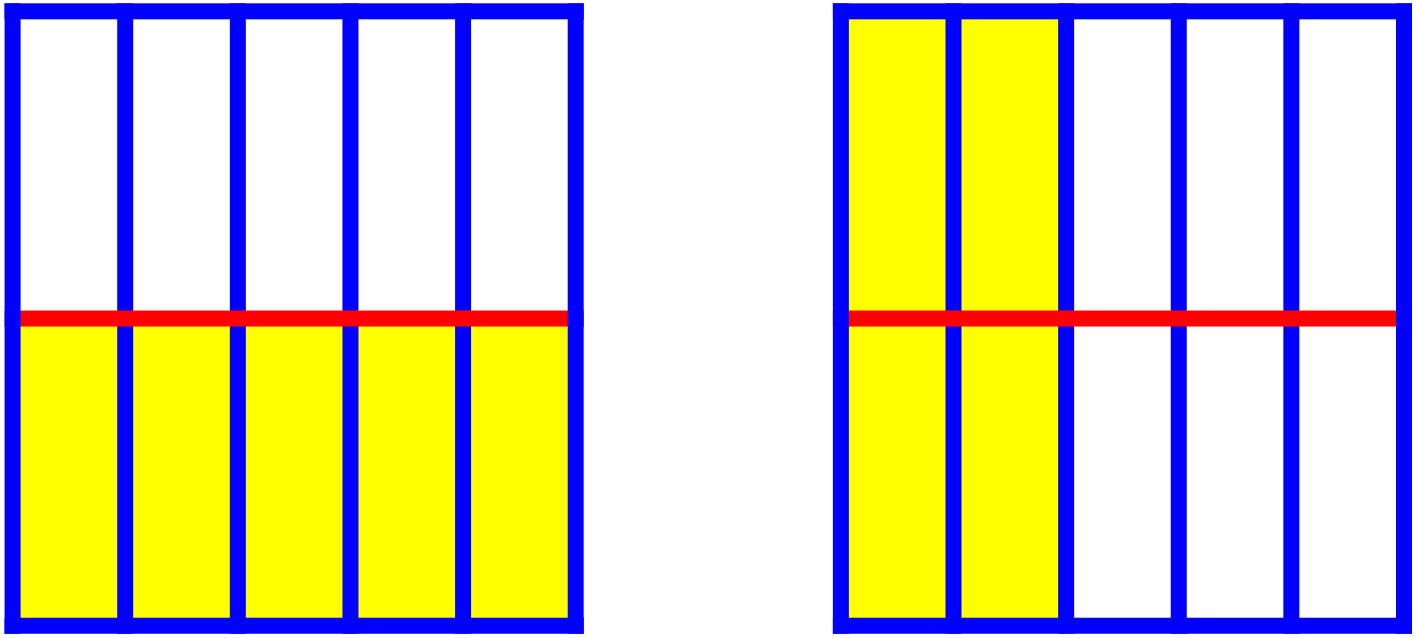




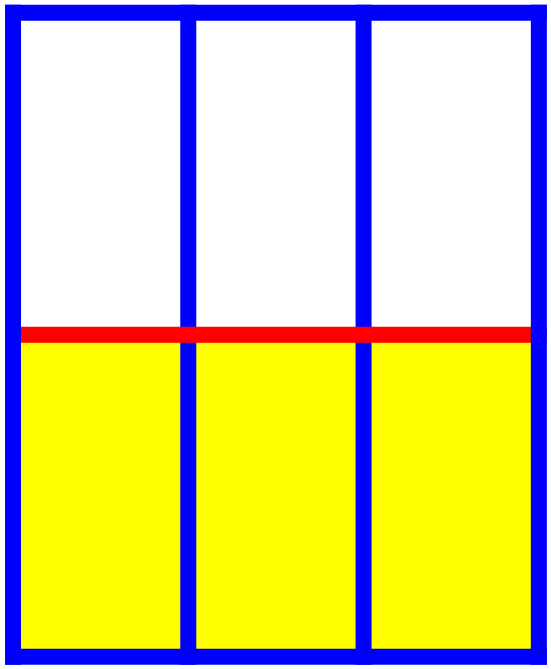
$$\frac{1}{3} + \frac{3}{4} = \frac{4}{12} + \frac{9}{12} = \frac{13}{12} = ?$$

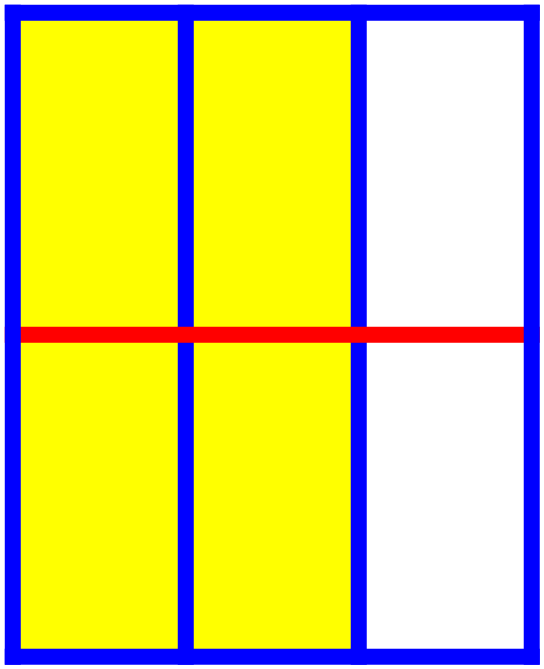


$$\frac{1}{2} - \frac{1}{5} = \frac{5}{10} - \frac{2}{10} = \frac{3}{10}$$

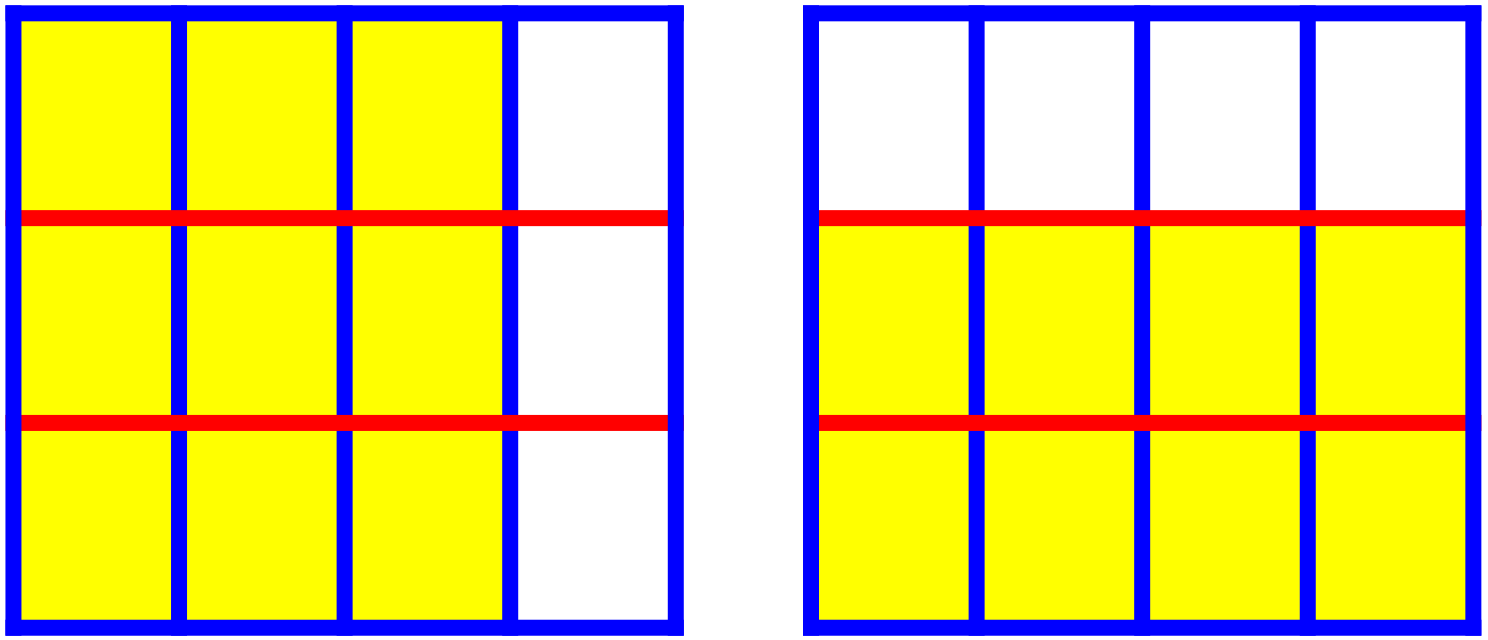


$$\frac{1}{2} - \frac{2}{5} = \frac{5}{10} - \frac{4}{10} = \frac{1}{10}$$





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



$$\frac{3}{4} - \frac{2}{3} = \frac{9}{12} - \frac{8}{12} = \frac{1}{12}$$