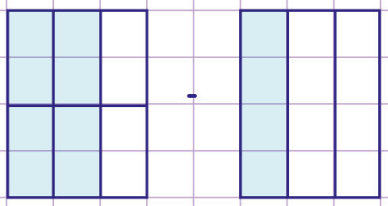
Name: ..... Class: .....

How to subtract fractions with unlike denominatore using models

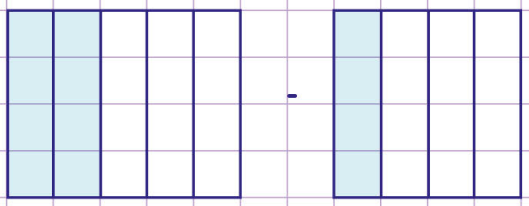
Using the given models as an aid, subtract the following fractions.

a.



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

b.



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

Solution

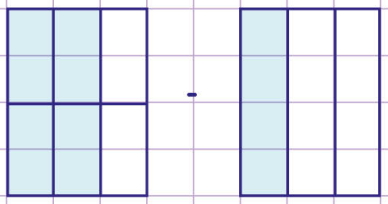
mathskills4kids

Name: ..... Class: .....

How to subtract fractions with unlike denominatore using models

Using the given models as an aid, subtract the following fractions.

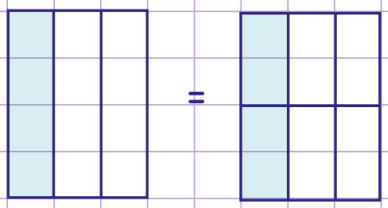
a.



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

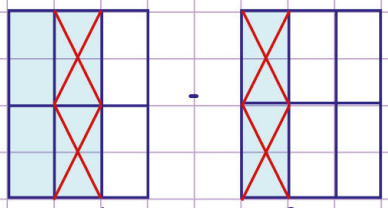
Let's first of all find an equivalent fraction of $\frac{1}{3}$ with 6 as the denominator. $\frac{1}{3} = \frac{1x2}{3x2} = \frac{2}{6}$.

Now, let's draw the model for $\frac{2}{6}$.



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

Finally, since the numerator of the second fraction is 2, we subtract by crossing out 2 shaded sqaures from each model.

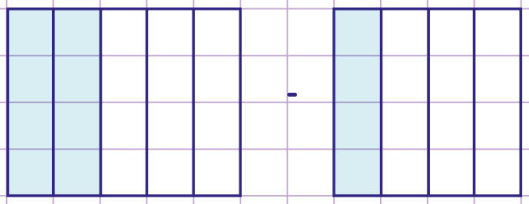


$\frac{4}{6}$ - $\frac{2}{6}$

You see that, after crossing out 2 shaded squares, we have 2 shaded squares left over which is equal to $\frac{2}{6}$.

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

b.



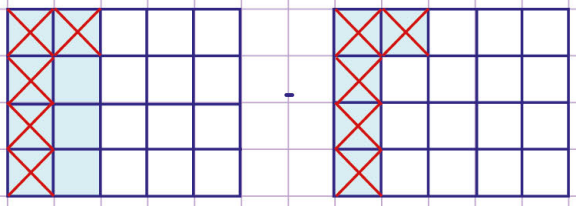
$\frac{2}{5}$ - $\frac{1}{4}$ = _____

Let's first of all find an equivalent fraction of $\frac{2}{5}$ and $\frac{1}{4}$ to get a common denominator

$\frac{2}{5} = \frac{2x4}{5x4} = \frac{8}{20}$

$\frac{1}{4} = \frac{1x5}{4x5} = \frac{5}{20}$

Now, let's draw models to represent these equivalent fractions.



$\frac{8}{20}$ - $\frac{5}{20}$

Finally, let's subtract using both models by crossing out 5 shaded squares from each model as shown above.

You see that, after crossing out 5 shaded squares, we have 3 shaded squares left over which is equal to $\frac{3}{20}$.

So, $\frac{2}{5} - \frac{1}{4} = \frac{8}{20} - \frac{5}{20} = \frac{3}{20}$.