

numerator

fraction

convert



equivalent

multiple

denominator

Compare:

$$\frac{3}{5} > \frac{11}{20}$$

Handwritten red annotations: A bracket above the fraction  $\frac{3}{5}$  is labeled  $\times 4$ . A bracket below the fraction  $\frac{11}{20}$  is labeled  $\times 4$ . The fraction  $\frac{11}{20}$  is written as  $\frac{12}{20}$  with a red  $1$  above the  $11$ . A red arrow points from the  $12$  to the  $11$ .

$$\frac{5}{6} > \frac{2}{3}$$

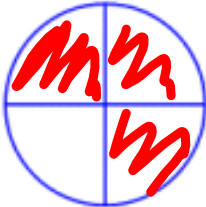
Handwritten red annotations: A bracket above the fraction  $\frac{5}{6}$  is labeled  $\times 2$ . A bracket below the fraction  $\frac{2}{3}$  is labeled  $\times 3$ . The fraction  $\frac{2}{3}$  is written as  $\frac{4}{6}$  with a red  $2$  above the  $2$  and a red  $3$  below the  $3$ . A red arrow points from the  $4$  to the  $2$ .

or

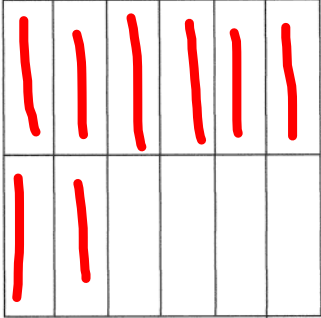
# Adding and subtracting fractions

**DENOMINATOR STAYS THE SAME!!!**

Can't touch this! →  $\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$



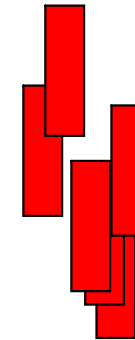
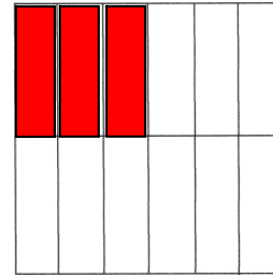
Can't touch this! →  $\frac{5}{12} + \frac{3}{12} = \frac{8}{12}$



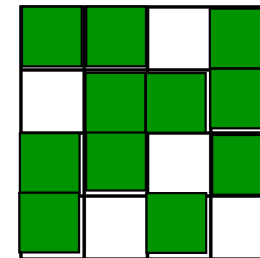
# Adding and subtracting fractions

**DENOMINATOR STAYS THE SAME!!!**

Can't touch this! →  $\frac{9}{12} - \frac{6}{12} = \frac{3}{12}$



Can't touch this! →  $\frac{11}{16} - \frac{4}{16} = \frac{7}{16}$



## What about if the denominators are different?!

1. Find a common multiple  
- a number that both denominators fit in to
2. Convert to have that same denominator
3. Add/subtract numerators  
- leave the denominators!

$$\frac{5}{10} \times 2 = \frac{10}{20} + \frac{4}{20} = \frac{14}{20}$$

$$\frac{3}{9} \times 3 = \frac{9}{27} + \frac{4}{27} = \frac{13}{27}$$

$$\frac{3}{4} \times 6 = \frac{18}{24} - \frac{4}{6} \times 4 = \frac{16}{24} = \frac{2}{24}$$

11.01.20

L.O.: I can add and subtract fractions

**SPICY  
and HOT  
on  
worksheet  
on school  
website!**

Mild:

Add

$$\frac{2}{7} + \frac{4}{7}$$

$$\frac{6}{13} + \frac{3}{13}$$

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

Subtract

$$\frac{8}{12} - \frac{2}{12}$$

$$\frac{15}{18} - \frac{10}{18}$$

$$\frac{19}{20} - \frac{7}{20}$$

You need to convert to have  
same denominators before  
adding/subtracting!

$$\frac{2}{4} + \frac{3}{8}$$

$$\frac{2}{3} - \frac{3}{6}$$

$$\frac{2}{15} + \frac{3}{5}$$

