

Improper/Mixed Number Fractions

$\frac{13}{5}$	$2\frac{3}{5}$	2	$\frac{3}{5}$
Improper fraction	Mixed Number	Whole number	Denominator
			Numerator

An improper fraction is a fraction where the numerator is larger than the denominator. To turn an improper fraction into a mixed number:

1.) Divide the numerator by the denominator. $13 \div 5 = 2 \text{ r } 3$

2.) There are now 2 (whole number) with 3 remainders. Any remainders remain as the numerator.

so... $\frac{13}{5} = 2\frac{3}{5}$

Adding and Subtracting Fractions



Before you can add or subtract fractions with different denominators, you must first find equivalent fractions with the same denominator.

$$\frac{1}{3} + \frac{2}{7} =$$

Find a number (product) the denominators are both a factor of. In this case 3 and 7 are factors of 21.

$$\frac{1 \times 7}{3 \times 7} + \frac{2 \times 3}{7 \times 3} = \frac{7}{21} + \frac{6}{21}$$

Remember, whatever you do to the denominators you must also do to the numerators.

$$\frac{7}{21} + \frac{6}{21} = \frac{7+6}{21} = \frac{13}{21}$$

Now you can simply add (or subtract) the numerators and write the sum over the common denominator.

Equivalent Fractions

Equivalent fractions are fractions that look different but show exactly the same amount.

$$\frac{1}{2} = \frac{8}{16} \qquad \frac{12}{18} = \frac{2}{3}$$

You can make equivalent fractions by multiplying or dividing the numerator and **denominator** by the same number.

$$\frac{2}{5} = \frac{6}{15}$$

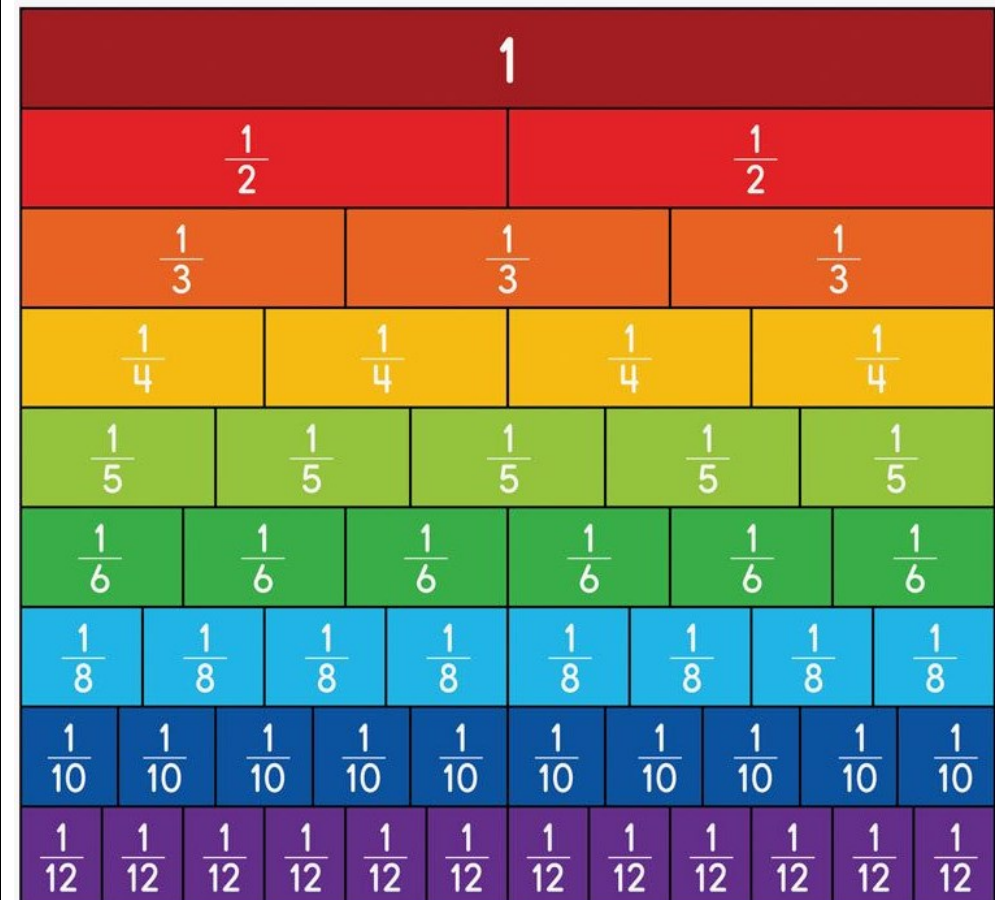
SO...

$$? = 2 \times 3 = 6$$

$$\frac{4}{6} = \frac{16}{24}$$

$$? = 24 \div 4 = 6$$

Can you use the fraction wall to spot equivalent fractions?



$$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12}$$