

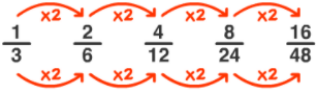

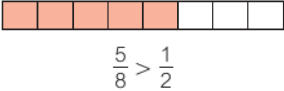
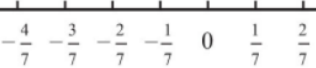



Prior Knowledge		
Equivalent fractions		Fractions with the same value
Numerator		The top number is the number of parts.
Denominator		The bottom number is the total number of parts the whole is divided into.
Improper fraction	$\frac{7}{4}$	The numerator is the same or bigger than the denominator.
Mixed number	$1\frac{3}{8}$	An improper fraction written as a whole number and a fraction.
Write equivalent fractions		Multiply or divide the numerator and the denominator by the same number.
Highest common factor (HCF)	<p>12: 1, 2, 3, 4, 6, 12</p> <p>16: 1, 2, 4, 8, 16</p> <p>4 is the HCF of 12 and 16</p>	The highest common factor that will divide 2 or more numbers exactly.
Simplify fractions		Simplify by dividing the numerator and the denominator by their highest common factor.
Lowest common multiple (LCM)	<p>3: 3, 6, 9, 12, 15, 18, 21, 24, ...</p> <p>4: 4, 8, 12, 16, 20, 24, 28, ...</p> <p>12 is the LCM of 3 and 4</p>	The smallest number that is the multiple of 2 or more numbers.
Core Knowledge		
More or less than $\frac{1}{2}$		Check if the numerator is more or less than $\frac{1}{2}$ of the denominator.
Common denominator	$\frac{1}{12}, \frac{5}{12}$ and $\frac{7}{12}$	Fractions with the same denominator.
Ordering fractions	$\frac{3}{10}, \frac{1}{3}, \frac{2}{5}$	Write the fractions as equivalent fractions with the same denominator, then compare the numerators.
Ordering negative fractions		Use a number line to help order fractions, think about how close a fraction is to zero.
Adding or subtracting fractions	$\frac{5}{12} + \frac{2}{12} = \frac{7}{12}$	To add or subtract the fractions must have a common denominator. Add or subtract the numerators, NOT the denominators.
Multiplying fractions	$\frac{5}{12} \times \frac{3}{10} = \frac{5 \times 3}{12 \times 10} = \frac{3 \times 5}{12 \times 10} = \frac{3 \times 5}{4 \times 12 \times 2 \times 5} = \frac{1}{8}$	If possible, simplify first by cross cancelling. Then multiply the numerators and multiply the denominators.
Reciprocal		The reciprocal of a fraction is the 'upside down' fraction. Also known as the multiplicative inverse. A number multiplied by its reciprocal is always 1.
Whole numbers as fractions	$4 = \frac{4}{1}$	Write a whole number as a fraction by giving it a denominator of 1.
Dividing fractions	$\frac{2}{3} \div \frac{5}{4} = \frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$	To divide fractions, multiply by its reciprocal.
Adding or subtracting mixed numbers	$2\frac{1}{6} + 3\frac{4}{6} = 5 + \frac{1}{6} + \frac{4}{6} = 5\frac{5}{6}$	Add or subtract the whole number parts first, then add or subtract the fraction part using a common denominator.

Multiplying or dividing mixed numbers	$2\frac{1}{3} \times 4\frac{2}{5} = \frac{7}{3} \times \frac{22}{5} = \frac{154}{15}$	Always write mixed numbers as improper fractions before multiplying or dividing.
Unit fraction	$\frac{1}{2}, \frac{1}{5}, \frac{1}{16}, \frac{1}{35}$	A unit fraction has a numerator of 1.