

Math Guidance KS2

<p>There are 3 Simple Steps to add fractions:</p> <p>Step 1: Make sure the bottom numbers (the denominators) are the same.</p> <p>Step 2: Add the top numbers (the numerators), put the answer over the denominator.</p> <p>Step 3: Simplify the fraction (if needed)</p>	$\frac{4}{3} + \frac{5}{6}$ <p>Becomes</p> $\frac{8}{6} + \frac{5}{6} = \frac{13}{6} \text{ or } 2\frac{1}{6}$
<p>There are 3 Simple Steps to subtract fractions:</p> <p>Step 1: Make sure the bottom numbers (the denominators) are the same.</p> <p>Step 2: Subtract the top numbers (the numerators), put the answer over the denominator.</p> <p>Step 3: Simplify the fraction (if needed)</p>	$\frac{4}{3} - \frac{5}{6}$ <p>Becomes</p> $\frac{8}{6} - \frac{5}{6} = \frac{3}{6} \text{ or } \frac{1}{2}$
<p>Multiplying fractions.</p> <p>We just multiply the numerators (top numbers) and multiply the denominators (bottom numbers). This will probably mean that you can cancel down the answer at the end. Or you can do it before you start.</p>	$\frac{4}{6} \times \frac{5}{6} = \frac{20}{36}$
<p>To Divide a Fraction by a Whole Number:</p> <p>Step 1: Multiply the bottom number of the fraction by the whole number.</p> <p>Step 2: Simplify the fraction (if needed)</p>	$\frac{2}{3} \div 3 = \frac{2}{9}$
<p>To Multiply a Fraction by a Whole Number:</p> <p>Step 1: Multiply the top number of the fraction by the whole number.</p> <p>Step 2: Simplify the fraction (if needed)</p>	$\frac{2}{3} \times 3 = \frac{6}{3} = 2$
<p>To convert Mixed number to top heavy fraction</p> <p>Step 1: Multiply whole number by denominator.</p> <p>Step 2: Add numerator.</p>	$4\frac{2}{3} = \frac{14}{3}$
<p>BIDMAS</p> <p>Stands for Brackets, Indices, Division and Multiplication, Addition and Subtraction. All of these terms are fairly obvious except for 'Indices', which are just powers (eg 2^3 or 4^2 etc.) So the order you should do your calculations in is: Brackets. Indices. Division. Multiplication. Addition. Subtraction.</p>	<p>$6 + 4 \times 3 = (\text{Do multiplication first} = 12)$</p> <p>$6 + 12 = 18$</p>

Angles:

Right Angle = 90°

Triangles = 180°

Straight Line = 180°

Around a point = 360° Quadrilaterals = 360°

5 miles = 8 km

1km = 1000m

1kg = 1000g

1l = 1000ml

100cm = 1m

1cm = 10 mm

Roman Numerals

I = 1

V = 5

X = 10

L = 50

C = 100

D = 500

M = 1000

Percentages

1% = divide amount by 100

10% = divide amount by 10

Percentage/fraction/decimal

100% = 1 = 1

75% = $\frac{3}{4}$ = 0.75

20% = $\frac{1}{5}$ = 0.2

50% = $\frac{1}{2}$ = 0.5

10% = $\frac{1}{10}$ = 0.1

25% = $\frac{1}{4}$ = 0.25

Parallel = lines never meet (train tracks)

Perpendicular = join to make a right angle

Multiple are numbers in that times table

Factor are numbers that divide exactly into another number.

A Prime Number can be divided evenly only by 1, or itself. And it must be a whole number greater than 1.

A prime factor is a factor that is a prime number: one of the prime numbers that, when multiplied, give the original number.

Example: The prime factors of 15 are 3 and 5 ($3 \times 5 = 15$, and 3 and 5 are prime numbers).

Perimeter = All sides added together

Area = Length x width

Volume = Length x width x depth

