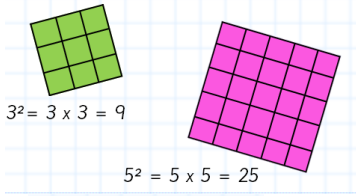
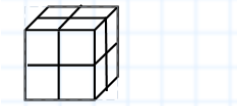
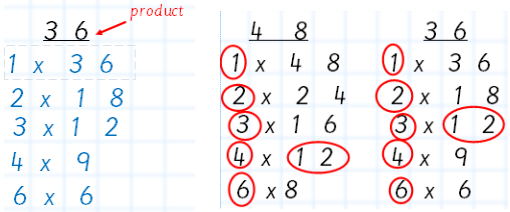
Why are times tables useful?

Square and cube numbers

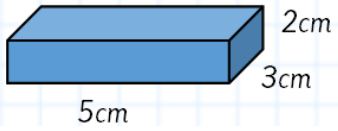




Factors and common factors



Calculating volume



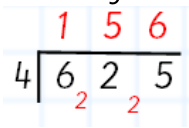
Volume = 5 x 3 x 2

Using algebraic rules

Rule: 5 n - 4

1st term: 5 x 1 - 4 = 1
2nd term: 5 x 2 - 4 = 6
3rd term: 5 x 3 - 4 = 11
4th term: 5 x 4 - 4 = 16
5th term: 5 x 5 - 4 = 21

Short and long division

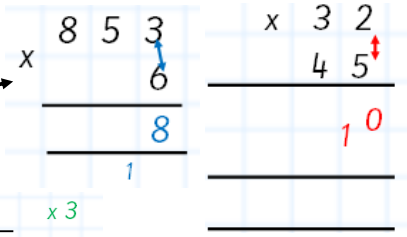


Multiples and common multiples

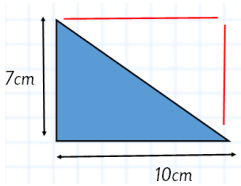
Multiples of 3: 3, 6, 9, 12, 18, 21, 24

Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

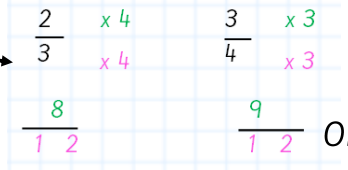
Short and long multiplication



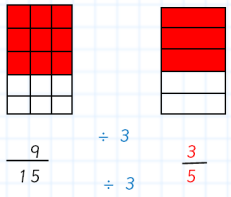
Area of rectangles, triangles and parallelograms



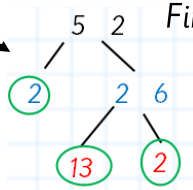
Ordering and comparing fractions



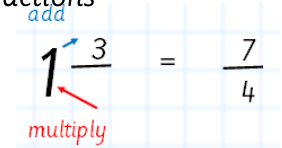
Simplifying fractions



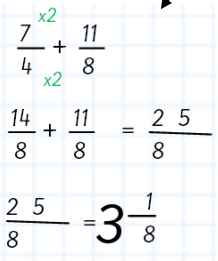
Finding prime factors



Converting between mixed and improper fractions



Adding, subtracting, multiplying and dividing fractions



Finding a fraction or percentage of a number

3/4 of 48

48 ÷ 4 = 12

dividing by 4 finds one quarter.

12 x 3 = 36

multiplying by 3 finds 3 quarters

Identifying prime and composite numbers

A prime number is a whole number greater than 1 with no divisors except 1 and itself.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Calculating ratio

A prize is shared in a ratio of 3 : 4 between Jamie and Dan. If Jamie gets £21, how much will Dan get?