

### Number facts:

Learn Times Tables by heart up to 12



### Square Numbers up to 15

Definition: A square number is the result of multiplying a whole number by itself.

e.g:  $1^2 = 1 \times 1 = 1$ ,  $2^2 = 2 \times 2 = 4$ ,  $7^2 = 7 \times 7 = 49$

### Cube Numbers up to 10

Definition: A cube number is the result of multiplying a whole number by itself then by itself again.

e.g:  $1^3 = 1 \times 1 \times 1 = 1$ ,  $2^3 = 2 \times 2 \times 2 = 8$ ,  $7^3 = 7 \times 7 \times 7 = 343$

### Prime numbers

Definition: A prime number has exactly two factors: 1 and itself  
2, 3, 5, 7, 11, 13, ... .., 67, ... ..

### Negative Numbers

Add, subtract, multiply and divide negative numbers

### Factors and Multiples of any whole number

e.g. Factors of 12 are: 1, 2, 3, 4, 6 and 12

Multiples of 12 are: 12, 24, 36, 48, ... ..

### Parts of a Fraction

$\frac{3}{4}$  ← Numerator  
← Denominator

### Key words

Sum: to add      Difference: to subtract      Product: to multiply

### Inequalities

Know how to use the inequality symbols  $<$ ,  $\leq$ ,  $>$ ,  $\geq$

$3 < 5$       3 is less than 5

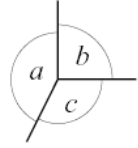
$4 \leq 8$       4 is less than or equal to 8

$6 > -2$       3 is greater than -2

$7 \geq -1$       7 is greater than or equal to -1

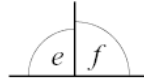
### Geometry:

#### Angle Fact



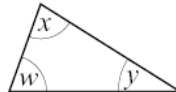
$$a + b + c = 360^\circ$$

Angles around a point add up to  $360^\circ$



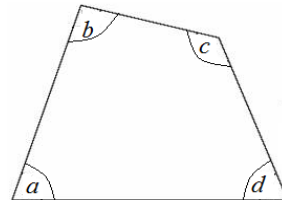
$$e + f = 180^\circ$$

Angles on a straight line add up to  $180^\circ$



$$w + x + y = 180^\circ$$

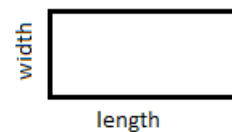
Angles in a triangle add up to  $180^\circ$



$$a + b + c + d = 360^\circ$$

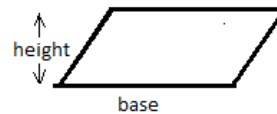
Angles in a quadrilateral add up to  $360^\circ$

### Area



Area = length x width

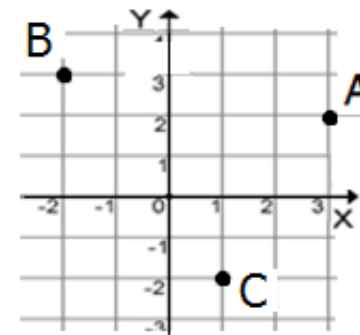
Area of parallelogram =  $base \times height$



Area of a triangle =  $\frac{base \times height}{2}$



### Coordinates



A(3,2) Starting from (0,0), A is 3 squares right and 2 squares up

B(-2,3) 2 left and 3 up from (0,0)

C(1, -2) 1 right and 2 down from (0,0)

### Statistics & probability:

Keyword	How to find	Example 5, 7, 1, 2, 9, 5, 6
Mode	The most common value	In order: 1, 2, 5, 5, 6, 7, 9 Mode = 5
Median	The middle value of an ordered set	In order: 1, 2, 5, 5, 6, 7, 9 Median = 5
Mean	The sum of the values ÷ the number of values	Sum = 35 Mean = $35 \div 7 = 5$
Range	Largest value – smallest value	Range = $9 - 1 = 8$

### Algebra facts:

$ab$  means  $a \times b$

$a^2$  means  $a \times a$

$y$  times 3 is always written as  $3y$  not  $y3$