## Order of Operations

1

Solve in this order

| | |
|---|---|
| **B**rackets | () |
| **I**ndices | $^2$ |
| **D**ivision | ÷ |
| **M**ultiplication | × |
| **A**ddition | + |
| **S**ubtraction | - |

Example

$3 + (5 - 2)^2 \times 4$

$= 3 + (3)^2 \times 4$

$= 3 + 9 \times 4$

$= 3 + 36$

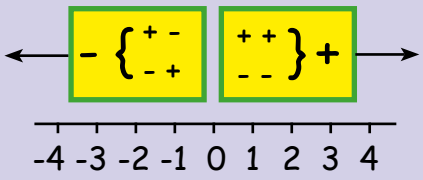
$= 39$



## Positive and Negative Numbers

2

### Addition and Subtraction




Examples

-2 + 3 = 1

-2 - 3 = -5

2 - - 3 = 5

2 + - 3 = -1

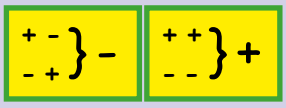
### Multiplication and Division

+3 x +2 = +6

-3 x -2 = +6

-3 x +2 = -6

+3 x -2 = -6




+8 ÷ +4 = +2

-8 ÷ -4 = +2

-8 ÷ +4 = -2

+8 ÷ -4 = -2



## Prime Numbers

3

**A prime number has exactly two factors: 1 and the number itself.**

**Example**
**The only factors of 5 are 1 and 5, so 5 is a prime number.**

Note:
1 is not a prime number.
2 is the only even prime number.

***2, 3, 5, 7, 11, 13, 17, 19...***



## Square Numbers

4

*1, 4, 9, 16, 25, 36 ...* $n^2$

## Cube Numbers

*1, 8, 27, 64, 125, 216 ...* $n^3$

## Triangular Numbers

*1, 3, 6, 10, 15, 21 ...* $\frac{1}{2}n(n + 1)$

## The Fibonacci Sequence

*1, 1, 2, 3, 5, 8, 13, ...*



## Lowest Common Multiple (LCM)

5

**The LCM of two or more numbers is the lowest number which is a multiple of all of them.**

Example

Multiples of 3: 3, 6, 9, (12) 15, 18, 21, (24)..

Multiples of 4: 4, 8, (12) 16, 20, (24)..

**Common multiples** of 3 and 4: 12, 24, 36..

The LCM of 3 and 4 is 12.



## Highest Common Factor (HCF)

6

**The HCF of two or more numbers is the highest number which is a factor of all of them.**

Example

Factors of 18: (1), (2), (3), (6), 9 and 18

Factors of 24: (1), (2), (3), 4, (6), 8, 12 and 24

**Common factors** of 18 and 24: 1, 2, 3 and 6

The HCF of 18 and 24 is 6.

## Decimal Places

7

**The number of decimal places (d.p.) tells you how many digits are needed after the decimal point.**

Examples:

5.4837 is 5.484 to 3 d.p.

5.4837 is 5.48 to 2 d.p.

5.4837 is 5.5 to 1 d.p.

3.697 is 3.70 to 2 d.p.
and 3.7 to 1 d.p.



## Significant Figures

8

**The number of significant figures (s.f.) shows how many digits are in the number.**

eg 7 891 is 8 000 to 1 s.f.
3 032 is 3 030 to 3 s.f.
5.7125 is 5.71 to 3 s.f.
0.002812 is 0.003 to 1 s.f.

Zeros at the beginning and end of a number are not counted as they are only there to keep digits in the correct place value column.

Example

799 is 800 to 1s.f and to 2 s.f.



## Standard Form

9

$1 \leq a < 10$

n is a positive or negative whole number.

$a \times 10^{n}$

Examples

$2\,510\,000 = 2.51 \times 10^{6}$

$0.00003105 = 3.105 \times 10^{-5}$



## Index Notation

10

| Notation | Example |
|---|---|
| $n^2 = n \times n$ | $5^2 = 5 \times 5 = 25$ |
| $n^3 = n \times n \times n$ | $2^3 = 2 \times 2 \times 2 = 8$ |
| $n^1 = n$ | $9^1 = 9$ |
| $n^0 = 1$ | $342^0 = 1$ |
| $(n^a)^b = n^{a \times b} = n^{ab}$ | $(7^3)^2 = 7^3 \times 7^3 = 7^6$<br>$(7^3)^2 = 7^{3 \times 2} = 7^6$ |



## Laws of Indices

11

$$n^a \times n^b = n^{a+b}$$

Example: $7^3 \times 7^2 = 7^{3+2} = 7^5$

$7^3 \times 7^2 = 7 \times 7 \times 7 \times 7 \times 7 = 7^5$

$$\frac{n^a}{n^b} = n^a \div n^b = n^{a-b}$$

Example: $\frac{7^3}{7^2} = 7^3 \div 7^2 = 7^{3-2} = 7^1 = 7$

$7^3 \div 7^2 = \frac{\cancel{7}^{1} \times \cancel{7}^{1} \times 7}{\cancel{7}_{1} \times \cancel{7}_{1}} = 7^1 = 7$



## The Unique Factorisation Theorem

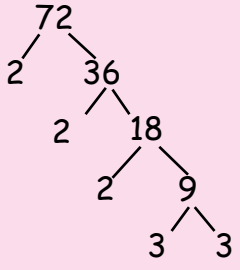
12

**Every integer greater than 1 is either a prime number, or is the product of prime numbers.**

Example:

$72 = 2 \times 36$
$72 = 2 \times 2 \times 18$
$72 = 2 \times 2 \times 2 \times 9$
$72 = 2 \times 2 \times 2 \times 3 \times 3$

Prime Numbers

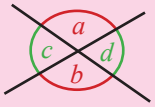



A product is the answer when 2 or more numbers are multiplied together.

## Equal Angles

13

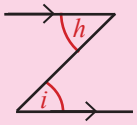
### Vertically opposite angles



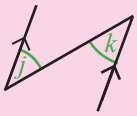

$a° = b°$

$c° = d°$

### Alternate angles

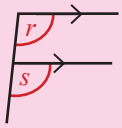



$h° = i°$

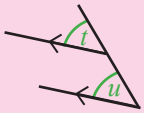



$j° = k°$

### Corresponding angles




$r° = s°$



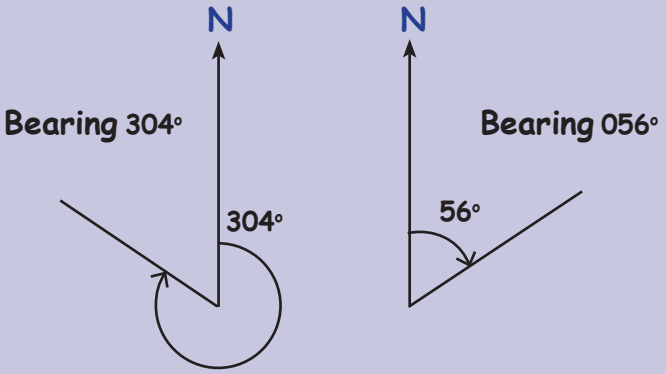

$t° = u°$



## Bearings

14

Bearings are measured clockwise from North and have three digits.






## The Angle Sum of a Triangle

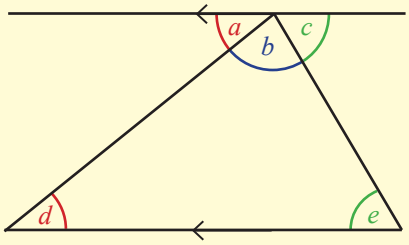
15

Alternate angles are equal so

$a° = d°$

and

$c° = e°$




**Angles on a straight line add up to 180°**

**So $a° + b° + c° = 180°$**

**So the interior angles of any triangle add up to 180°**

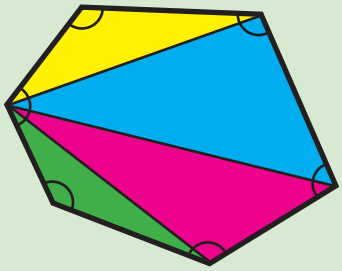


## Interior Angles of Polygons

16

A polygon with $n$ sides can be split into $n - 2$ triangles.

The sum of the angles of each triangle is 180°.



**The sum of the interior angles of an n sided polygon is $(n - 2) \times 180°$.**

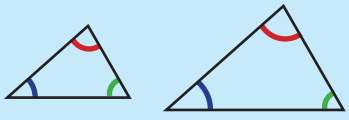


## Similar Triangles

17

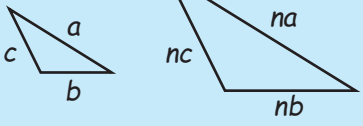
Similar triangles are the same shape but different sizes.

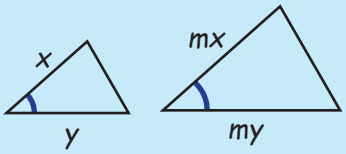
There are 3 ways to spot similar triangles:



corresponding angles all the same (AAA),

corresponding sides in the same proportion (SSS),



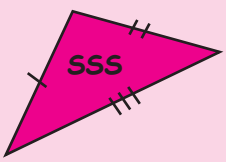



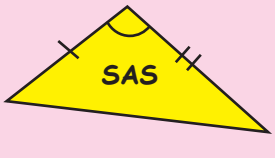

two pairs of sides in same proprtion and included angle equal (SAS).



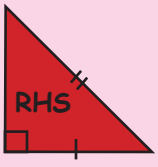
## Congruent Triangles

18

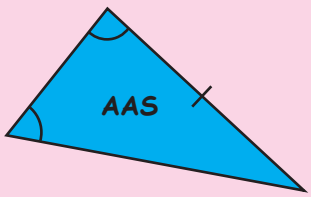



**Congruent triangles are identical. There are five ways to identify congruent triangles.**







## Metric Measures

19

10 millimetres (mm) = 1 centimetre (cm)

100 centimetres (cm) = 1 metre (m)

1000 metres (m) = 1 kilometre (km)

1000 grams (g) = 1 kilogram (kg)

1000 millilitres (ml) = 1 litre (l)

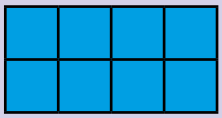


## Area

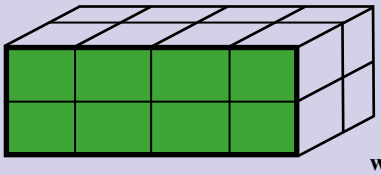
20

Area is measured in square units, units$^2$ e.g. cm$^2$, m$^2$ and km$^2$.

The **area** of a 2D (flat) shape is the amount of space inside the shape.



The **surface area** of a 3D (solid) shape is the area of each surface added up.

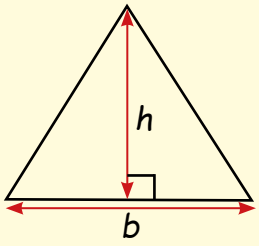


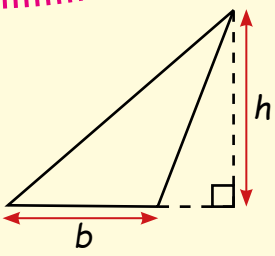


## Triangles

21

$$\text{Area } A = \frac{1}{2} b \times h$$



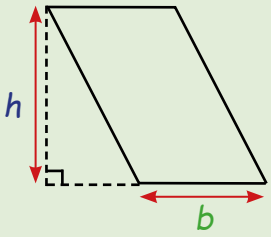



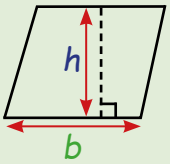

or $\frac{b \times h}{2}$ or $\frac{1}{2}(b \times h)$



## Parallelograms and Trapeziums

22



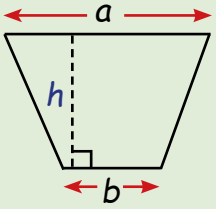



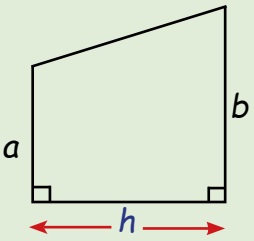

$A = b \times h$

$$A = \frac{a + b}{2} \times h$$

or $\frac{(a + b)h}{2}$

or $\frac{1}{2}(a + b)h$

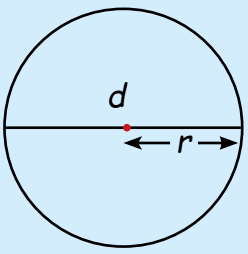


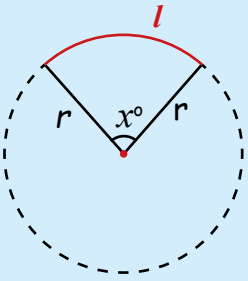



## Circumference and Arc Length

23




$C = \pi d$ or $C = 2\pi r$

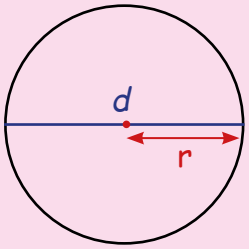


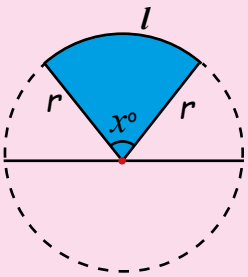

$$l = \frac{x}{360} \times 2\pi r$$



## Areas of Circles and Sectors

24



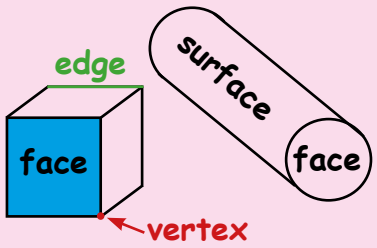




$A = \pi r^2$

$$A = \frac{x}{360} \times \pi r^2$$

## Solids

25




| Solid |
|---|
| Cylinder |
| Cone |
| Sphere |

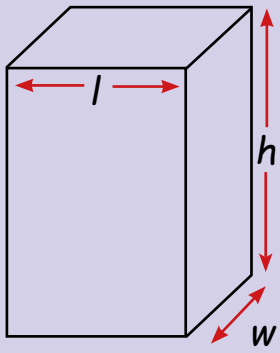
| Solid | E | F | V |
|---|---|---|---|
| Cube | 12 | 6 | 8 |
| Cuboid | 12 | 6 | 8 |
| Square based pyramid | 8 | 5 | 5 |
| Triangular prism | 9 | 5 | 6 |

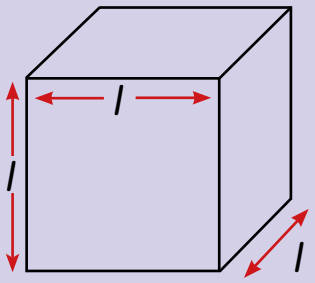


## Volumes of Cuboids and Cubes

26

Voulume is measured in cubic units, units$^3$
e.g. cm$^3$, m$^3$ and km$^3$.




$v = l \times w \times h$

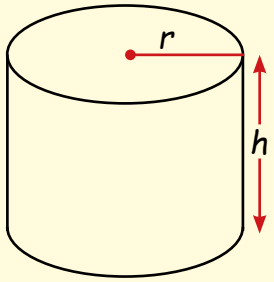
$v = l \times l \times l = l^3$



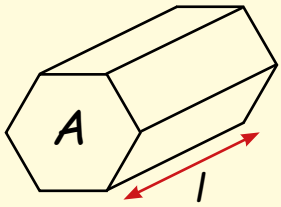
## Volumes of Cylinders and Prisms

27

$v = \pi r^2 h$




A prism has the same cross sectional area, $A$, all along its length.

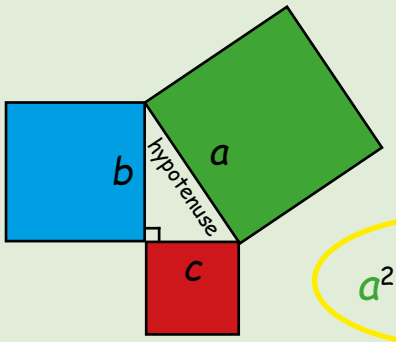



$V = A \times l$



## Pythagoras' Theorem

28




$a^2 = b^2 + c^2$

Rearrange to find the shorter sides:

$c^2 = a^2 - b^2$

and

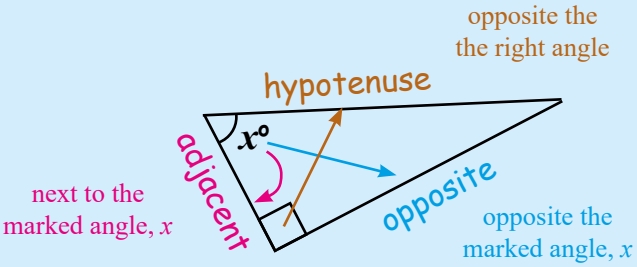
$b^2 = a^2 - c^2$



## Trigonometry

29

**Soh Cah Toa**



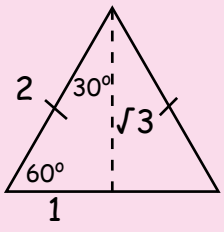

$\text{Sin } x^\circ = \frac{\text{opposite}}{\text{hypotenuse}}$ $\quad \text{Cos } x^\circ = \frac{\text{adjacent}}{\text{hypotenuse}}$

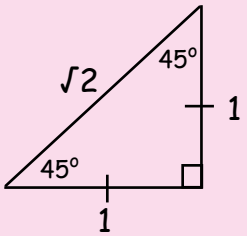
$\text{Tan } x^\circ = \frac{\text{opposite}}{\text{adjacent}}$



## Values of Trigonometrical Functions

30

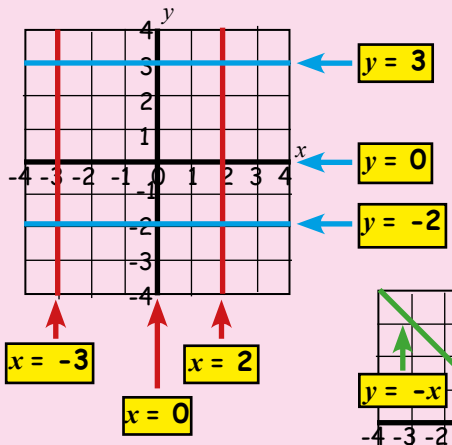


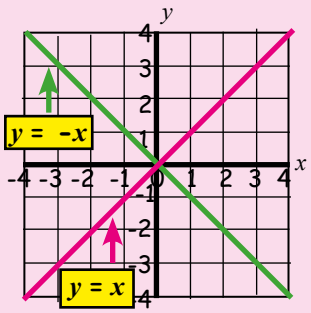




| $\sin$ | $\cos$ | $\tan$ |
|---|---|---|
| $\sin 0^\circ = 0$ | $\cos 0^\circ = 1$ | $\tan 0^\circ = 0$ |
| $\sin 30^\circ = \frac{1}{2}$ | $\cos 30^\circ = \frac{\sqrt{3}}{2}$ | $\tan 30^\circ = \frac{1}{\sqrt{3}}$ |
| $\sin 45^\circ = \frac{1}{\sqrt{2}}$ | $\cos 45^\circ = \frac{1}{\sqrt{2}}$ | $\tan 45^\circ = 1$ |
| $\sin 60^\circ = \frac{\sqrt{3}}{2}$ | $\cos 60^\circ = \frac{1}{2}$ | $\tan 60^\circ = \sqrt{3}$ |
| $\sin 90^\circ = 1$ | $\cos 90^\circ = 0$ | |

## Straight Lines Graphs

31



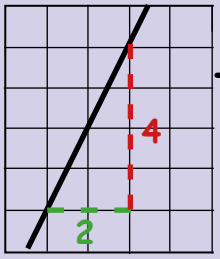






## The Gradient of a Straight Line

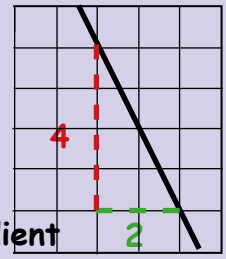
32

**Positive Gradient**



Gradient $\frac{4}{2} = 2$

**Negative Gradient**



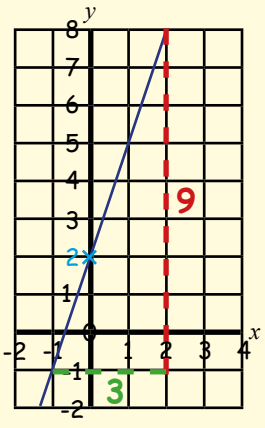
Gradient $-\frac{4}{2} = -2$

$$\text{Gradient, } m = \frac{y_2 - y_1}{x_2 - x_1}$$



## Equation of a Straight Line

33



$$y = mx + c$$

Gradient $m = \frac{9}{3} = 3$

y intercept $c = 2$

Equation of the line

$y = mx + c$

$y = 3x + 2$

or use

Given the gradient m and a point on the line $(x_1, y_1)$

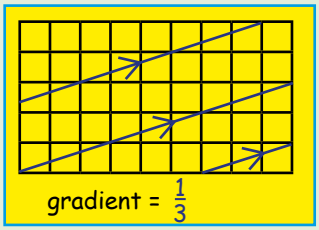
$y - y_1 = m(x - x_1)$

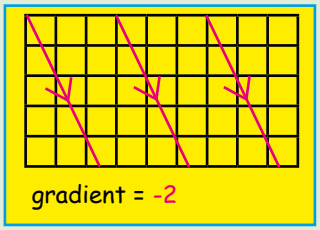


## Parallel and Perpendicular Lines

34

**Parallel** lines have the same gradient.




$y = \frac{1}{3}x + c$

$y = -2x + c$



## Quadratic Functions

35

Graph of

$y = x^2 + 2x - 3$

or

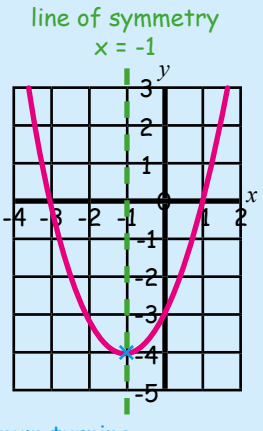
$y = (x - 1)(x + 3)$

Roots of the equation show intersection (crossing) with x-axis

$x^2 + 2x - 3 = 0$

$(x - 1)(x + 3) = 0$

$x = 1$ and $x = -3$

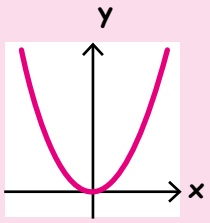




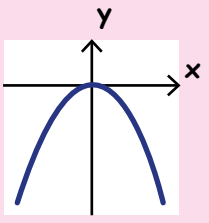

## Graph Shapes

36

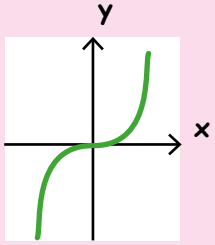
$y = x^2$



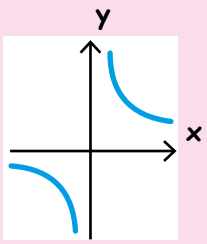
$y = -x^2$



$y = x^3$



$y = \frac{1}{x}$

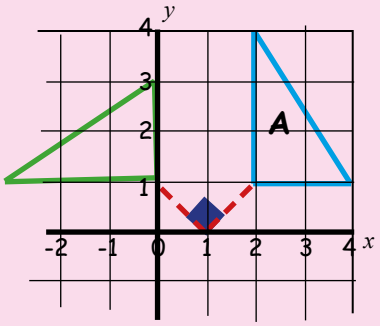


## Rotations

37

**Rotations are described by**
1). **a direction** (clockwise/anticlockwise)
2). **amount of turn** (angle in degrees)
3). **a centre of rotation** (a co-ordinate).

Triangle A is rotated
1). anticlockwise
2). through 90°
3). with centre of rotation (1,0).

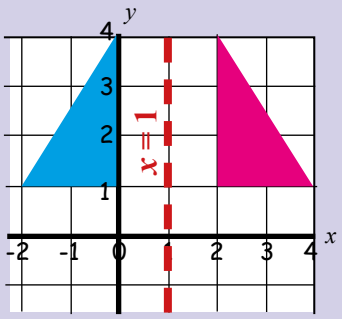




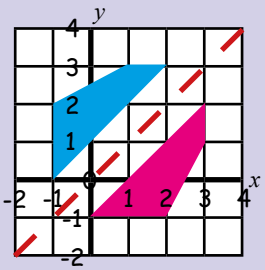

## Reflections

38

**Reflections are described by a mirror line.**




**Reflection in the line x = 1.**




**Reflection in the line y = x.**



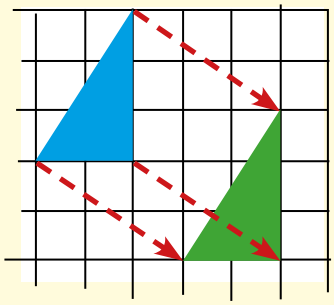
## Translations

39

**A translation slides an object, without turning it or changing its size.**

**Vector notation is used to describe translations.**

$\begin{pmatrix} x \\ y \end{pmatrix}$ $\begin{pmatrix} - \leftrightarrow + \\ + \updownarrow - \end{pmatrix}$



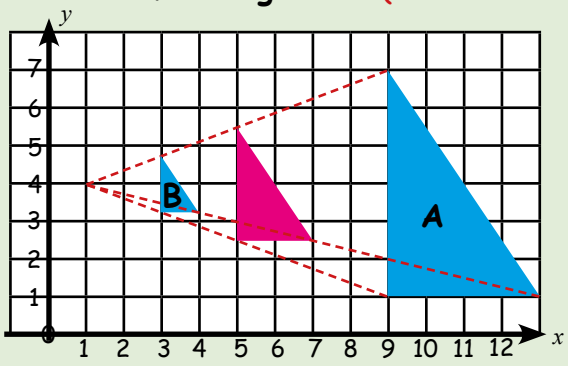
$\begin{pmatrix} 3 \\ -2 \end{pmatrix}$ **means move 3 to the right and 2 down**



## Enlargements

40

**Enlargements are described by**
1). **a scale factor** (a number),
2). **a centre of enlargement** (a co-ordinate).




A is enlargement scale factor 2 about (1, 4)
B is enlargement scale factor $\frac{1}{2}$ about (1, 4)



## Vocabulary for Algebra

41

| Word | Examples |
|---|---|
| Term | $3,\ 9.1,\ 4f,\ g^2,\ -4a^3b^2,\ \sqrt{c}$ |
| Expression | $2a + 5b,\ c^3 - 7,\ p - 4q + 5r$ |
| Equation | $n + 2 = 9,\ m^2 = 25,\ 8d - 2e = 9$ |
| Formula | $A=\pi r^2,\ v = u + at,\ a^2 = b^2 + c^2$ |
| Inequality | $5 > 2,\ \ p + q \geq 7,\ 6 \leq x < 11$ |
| Identity | $4(a + b) \equiv 4a + 4b$<br>$(u + v)^2 \equiv u^2 + 2uv + v^2$ |



## Sequences (nth Term)

42

### Linear

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| 9, | 11, | 13, | 15 |
| | +2 | +2 | +2 |

2n → 2, 4, 6, 8 (+7 +7 +7 +7)
2n+7 → 5, 8, 11, 14

### Quadratic

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| 3, | 8, | 15, | 24 |
| | +5 | +7 | +9 |
| | | +2 | +2 |

÷2

$1n^2$ → 1, 4, 9, 16 (+2 +4 +6 +8)
$n^2+2n$ → 3, 8, 15, 24

## The Difference of Two Squares

43

$$a^2 - b^2 = (a - b)(a + b)$$

Examples

$7^2 - 2^2 = (7 - 2)(7 + 2) = 5 \times 9 = 45$

$49^2 - 46^2 = (49 - 46)(49 + 46) = 3 \times 95 = 285$

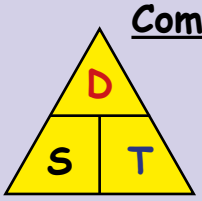
$d^2 - 64 = d^2 - 8^2 = (d - 8)(d + 8)$

$9u^2 - 4v^4 = (3u)^2 - (2v^2)^2 = (3u - 2v^2)(3u + 2v^2)$



## Compound Units

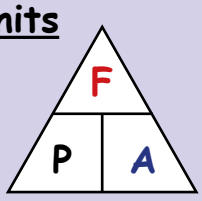
44




Speed = Distance / Time

Time = Distance / Speed

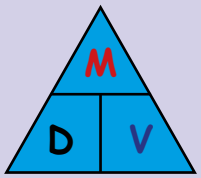
Distance = Speed x Time




Pressure = Force / Area

Area = Force / Pressure

Force = Pressure x Area




Density = Mass / Volume

Volume = Mass / Density

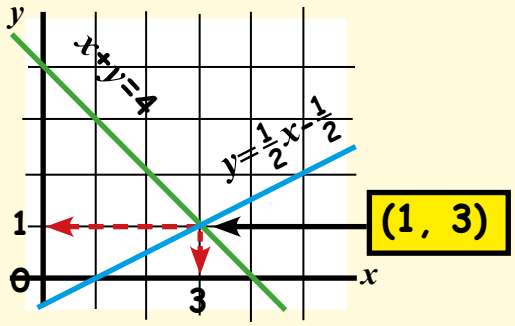
Mass = Density x Volume



## Simultaneous Equations

45

$x + y = 4$ and $y = \frac{1}{2}x - \frac{1}{2}$




**Solution**

$x = 1$ , $y = 3$



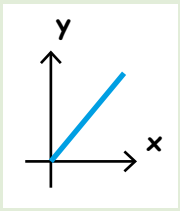
## Proportion

46

$y$ is "directly proportional" to $x$ is written

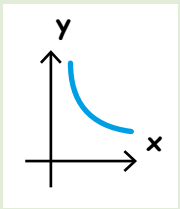
$y \propto x$ or $y = kx$

where $k$ is a constant




$y$ is "inversely proportional" to $x$ is written

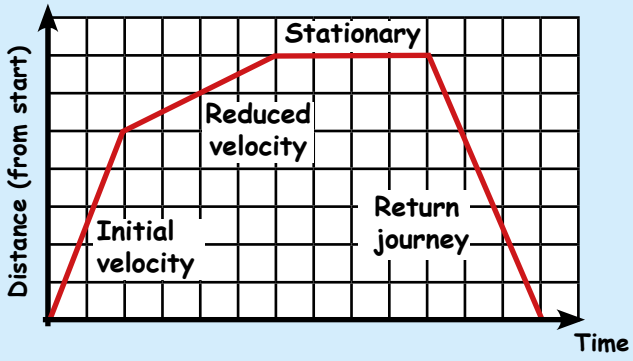
$y \propto \frac{1}{x}$ or $y = \frac{k}{x}$






## Distance Time Graphs

47




Gradient = $\frac{y}{x}$ = velocity



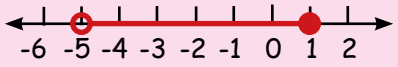
## Representing Inequalities

48

**Example 1** $-7 < 2x + 3 \leq 5$

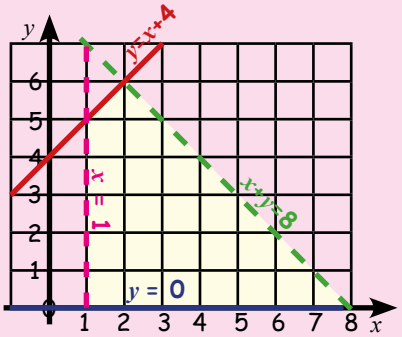
$-10 < 2x \leq 2$ $(-3)$

$-5 < x \leq 1$ $(\div 2)$




**Example 2**

$x + y < 8$,
$y \leq x + 4$,
$y \geq 0$ and
$x > 1$.



## Types of Data

49

**Primary data** is data that is collected by you. You do a survey, experiment etc.

**Secondary data** has been collected by someone else. This may be found in journals, newspapers, the internet etc.

**Discrete data** can only have certain values. These values jump along the number line e.g. shoe size, number of shoes.

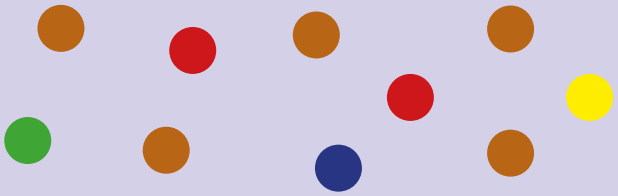
**Continuous data** can have any value along the number line (within a range) e.g. height, weight, time.



## The Mode and Modal Class

50

**The mode is the most common.**



The modal colour of the spots is brown because there are more brown spots than any other colour.

When information is grouped in classes, the modal class is the most common class.



## Median

51

**The median is the middle value after the numbers have been *arranged in order*.**

Example: 3, 5, 6, 8, 15 — Median 6

**If there is no single middle value, the median is the mean of the two middle values.**

$\frac{8 + 11}{2} = \frac{19}{2}$ Median 9.5

Example: 6, 7, 8, 11, 14, 17



## Finding the Mean

52

To find the mean of a set of values, **add** the values, then **divide** the total by the number of values.

Example — **5 values**

Find the mean of 8, 3, 6, 7 and 6.

$\frac{8 + 3 + 6 + 7 + 6}{5} = \frac{30}{5} = 6$

The mean is **6**.

Note: Beware BIDMAS on a calculator!
Press = after the addition before dividing.



## Median from a Frequency Table

53

5th, 6th, 7th and 8th score in here.

| Score | 5 | 6 | 7 | 8 | 9 | Total |
|---|---|---|---|---|---|---|
| Frequency | 1 | 3 | 4 | 6 | 1 | 15 |

1 4 8 14 15

Think of this as a list. The scores are:
5, 6, 6, 6, 7, 7, 7, **7**, 8, 8, 8, 8, 8, 8, 9.

There are 15 scores. The 8th score, **7**, is the median because it is the middle score.



## The Mean from a Frequency Table

54

| Age, a | Frequency, f | a × f |
|---|---|---|
| 11 | 3 | 11 × 3 = 33 |
| 12 | 5 | 12 × 5 = 60 |
| 13 | 2 | 13 × 2 = 26 |
| Total | 10 | 125 |

**Mean age** $= \frac{125}{10} = 12.5$

For grouped data (e.g. $120 < h \leq 126$) multiply the **mid-point** (123) of each class by the frequency.

## Probability

55

0 The **probability scale** 1

Probability is always written as a **fraction**, a **decimal** or a **percentage**

e.g. $\frac{1}{2}$ , 0.5, or 50%.

**Relative Frequency** = $\frac{\text{Number of succesful trials}}{\text{Total number of trials}}$

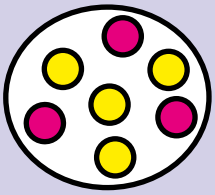
If the probability of A happening is $x$, the probability of A **not** happening is $1 - x$.

or if $P(A) = x$ then $P(A') = 1 - x$.

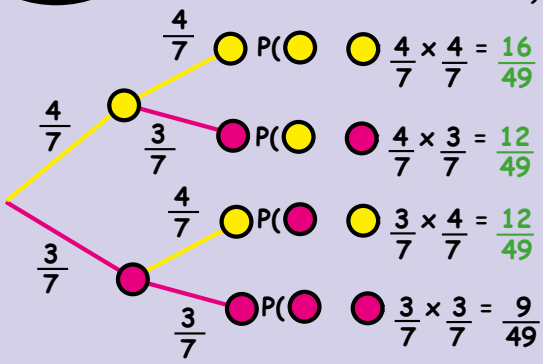


## Tree Diagrams

56



Independent events
Sampling *with replacement* (a ball is taken, replaced and another ball is chosen).



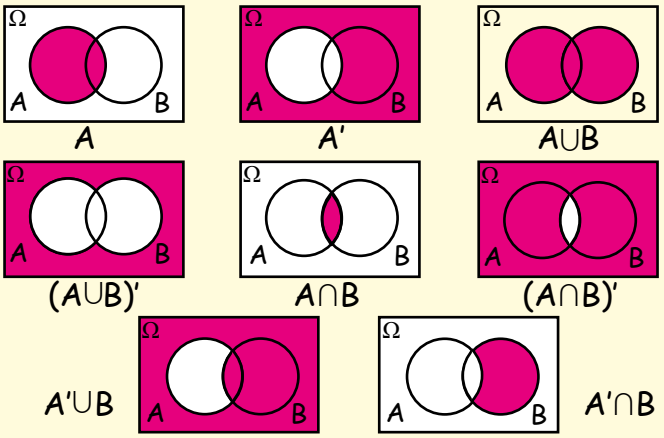

P(At least 1 ) = $\frac{16}{49} + \frac{12}{49} + \frac{12}{49} = \frac{40}{49}$



## Set Notation and Venn Diagrams

57

$A'$ → the complement of A (not A)
$A \cup B$ → the union of A and B (combined)
$A \cap B$ → the intersection of A and B (overlap)
$\Omega$ or $\xi$ → the universal set






## Dependent and Independent Events

58

When the outcome of one event depends on the outcome of another event, the events are **dependent**.

When the outcome of one event has *no effect* on the outcome of another event, the events are **independent**.

To find the probabilty of two independent events, A and B, happening, **multiply** the probabilities. (AND rule)

**P(A and B) = P(A∩B) = P(A) × P(B)**



## Mutually Exclusive Events

59

If two events cannot happen at the same time they are **mutually exclusive**.

To find the probability of either A or B happening, for mutually exclusive events, **add the probabilities**. (OR rule)

**P(A or B) = P(A∪B) = P(A) + P(B)**

If events are not mutually exclsuive, **add** the probabilities, then **subtract** the probability of both happening.

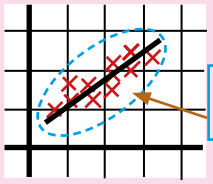
**P(A or B) = P(A∪B) = P(A) + P(B) - P(A and B)**



## Correlation and Line of Best Fit

60

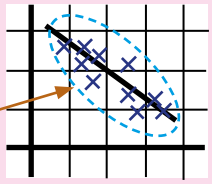
**Positive Correlation**



As one variable gets bigger, the other one also gets bigger.

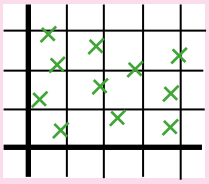
**Line of best fit**

**Negative Correlation**



As one variable gets bigger, the other one gets smaller.

**No Correlation**



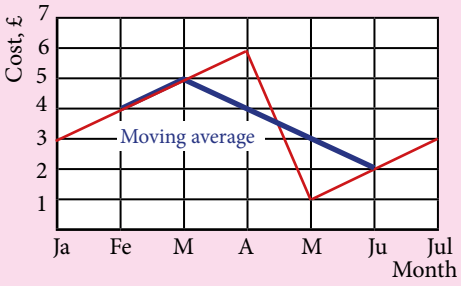
**No line of best fit**

## Moving Average/Time Series

61

3-point moving average - find mean of first 3 pieces of data, move along one - find mean of next 3 pieces of data etc.

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul |
|---|---|---|---|---|---|---|---|
| Cost, £ | 3 | 4 | 5 | 6 | 1 | 2 | 3 |
| Mov Av | | 4 | 5 | 4 | 3 | 2 | |




Plot at mid-points. Smooths out seasonal variations



## Surveys

62

**Good** Keep it simple
Use tick boxes
Ensure all responses are covered

**Bad** No leading questions
No personal questions
No overlapping responses

Randon sample: all members of the population have equal chance of being chosen.

Stratified sample: the population is divided into layers. The same proportion from each layer is surveyed as from the population.



**Tick the boxes when you know the facts.**

| | | | | | |
|---|---|---|---|---|---|
| 1 ☐ | 12 ☐ | 23 ☐ | 34 ☐ | 45 ☐ | 56 ☐ |
| 2 ☐ | 13 ☐ | 24 ☐ | 35 ☐ | 46 ☐ | 57 ☐ |
| 3 ☐ | 14 ☐ | 25 ☐ | 36 ☐ | 47 ☐ | 58 ☐ |
| 4 ☐ | 15 ☐ | 26 ☐ | 37 ☐ | 48 ☐ | 59 ☐ |
| 5 ☐ | 16 ☐ | 27 ☐ | 38 ☐ | 49 ☐ | 60 ☐ |
| 6 ☐ | 17 ☐ | 28 ☐ | 39 ☐ | 50 ☐ | 61 ☐ |
| 7 ☐ | 18 ☐ | 29 ☐ | 40 ☐ | 51 ☐ | 62 ☐ |
| 8 ☐ | 19 ☐ | 30 ☐ | 41 ☐ | 52 ☐ | |
| 9 ☐ | 20 ☐ | 31 ☐ | 42 ☐ | 53 ☐ | |
| 10 ☐ | 21 ☐ | 32 ☐ | 43 ☐ | 54 ☐ | |
| 11 ☐ | 22 ☐ | 33 ☐ | 44 ☐ | 55 ☐ | |



## How to use these revision cards

**These cards are for Foundation GCSE.**

**Print out the revision cards in colour. Use the thickest paper your printer can take.**

**On the back of the cards make notes or write typical exam questions for this fact.**

**When you know the fact, tick the box for that card. Each card is numbered.**

**The cards are one small part of the revision process and only cover the key facts.**

**The best practise is to go through as many past papers as possible.**
**Go to www.10ticks.co.uk/revision/GCSE for past papers.**

# 10TICKS offer for Parents

10ticks has been used in schools across the UK for over 15 years, with 70% of secondary schools using their award winning resources. Get your child to the top of the maths class with a 10ticks Home Learning System subscription. Your school has been given a unique discount code from award winning 10ticks for their online maths Home Learning System. This code offers you substantial savings on a fantastic maths resource. Also, for every parent that purchases the System, the school is rewarded with £1 credit that can be used to buy more maths resources from 10ticks. So your child benefits twice.

| | Annual Subscription* | Annual Subscription with code* |
|---|---|---|
| 1-user (1 child + parent) | £79.00 | £15.00 |
| 2-user (2 children + parent) | £85.00 | £18.00 |
| 3-user (3 children + parent) | £89.00 | £21.00 |

* Check website for latest offer price. Prices at time of printing this document, 19/03/2018

Your school is using the 10ticks resources and has been given a unique discount code for the award winning online maths Home Learning System.

Spalding Academy

Look at the huge savings you can make with **your unique school code**: HLS53488

**What does the 10ticks Home Learning System provide?**

The 10ticks Home Learning System is an innovative online solution offering comprehensive mathematical support and resources to help bring the family together and your child to succeed. There are 100s of engaging video guides, more than 4000 award winning working worksheets and 100s of fun interactive tests and games, suitable for both primary and secondary school children as 10ticks covers every maths topic from Reception to Year 11.
With so many maths resources you will have the flexibility to use the Home Learning System in a way that will benefit your child best. 10ticks is also great for revision, or for providing a bit of extra help, no matter what your child's ability. Access to the System will allow you and your child to log in whenever, and wherever you need to, with 24/7 access to our resources.

**How to subscribe to 10ticks using your code**

1). Go to http://www.10ticks.co.uk/offers
2). Click '**Buy**' on the number of users you want
The offer is only valid for the 12 month option with 1, 2 or 3 users
3). Log in with your existing details or select '**Register as a parent**' and register with 10ticks
4). A shopping cart will appear showing a one year subscription and the number of users
5). Type in the unique school code into the '**Affiliate Code**' box and click Apply
6). Check that the price has been correctly updated and press **Checkout**
7). Ensure your personal details are correct and press **Confirm Details**
8). You will then be asked to put in your card details
9). Congratulations! You have just purchased the 10ticks Home Learning System

If you would like any more information about 10ticks you can visit our website at www.10ticks.co.uk or email info@10ticks.co.uk