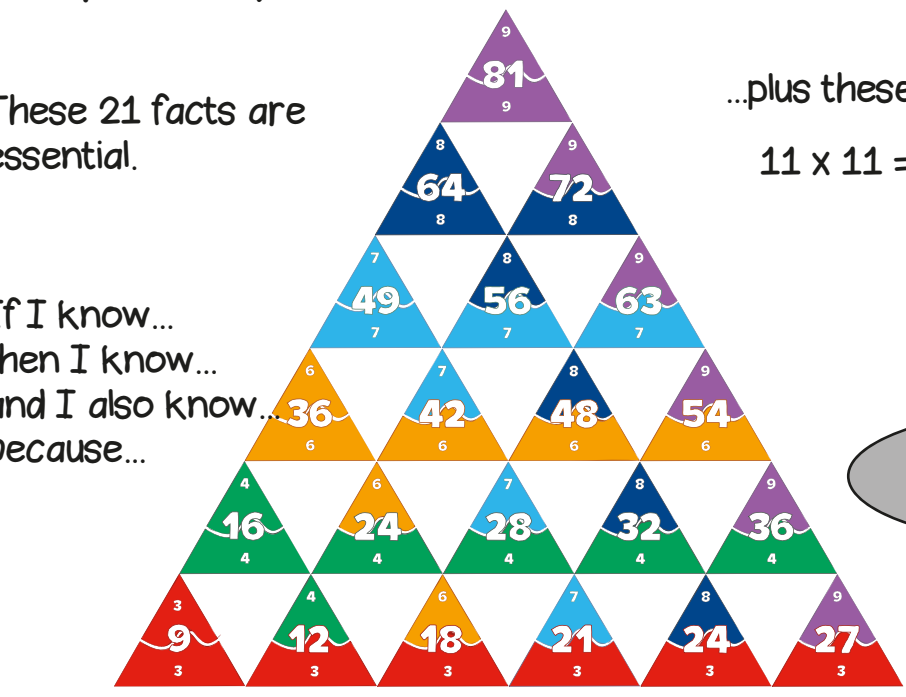


Multiplication, division and related facts

These 21 facts are essential.

If I know... then I know... and I also know... because...



...plus these:
11 x 11 = 121

- 12 x 3 = 36
- 12 x 4 = 48
- 12 x 6 = 72
- 12 x 7 = 84
- 12 x 8 = 96
- 12 x 9 = 108
- 12 x 11 = 132
- 12 x 12 = 144

Know your 2x, 5x and 10x facts

54

9 x 6 = 54 6 and 9 are factors of 54
 6 x 9 = 54 54 is a multiple of 6 and 9
 54 ÷ 9 = 6
 54 ÷ 6 = 9

$\frac{1}{6}$ of 54 = 9
 $\frac{1}{9}$ of 54 = 6

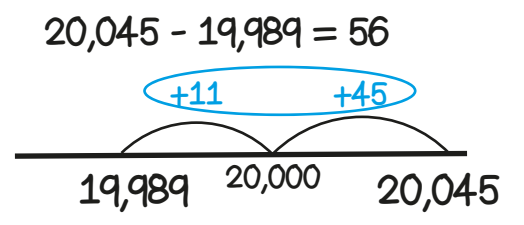
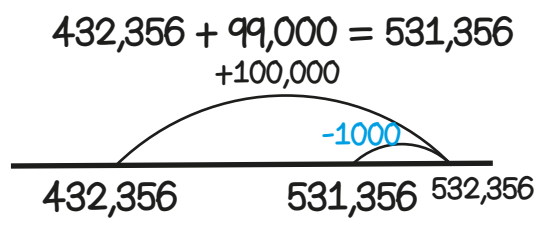
- 60 x 9 = 540
- 90 x 60 = 5400
- 0.9 x 6 = 5.4
- 0.9 x 0.6 = 0.54
- 540 ÷ 6 = 90
- 5400 ÷ 90 = 60
- 5.4 ÷ 9 = 0.6
- 54 ÷ 0.9 = 60 ...

Calculation methods

Just know it, with jottings or formal written method?

$$\begin{array}{r} 25,748 \\ + 46,374 \\ \hline 72,122 \\ \hline 1111 \end{array}$$

$$\begin{array}{r} 45,748 \\ - 26,374 \\ \hline 19,374 \end{array}$$



$$\begin{array}{r} 2427 \\ \times 38 \\ \hline 19416 \\ 72810 \\ \hline 92226 \end{array}$$

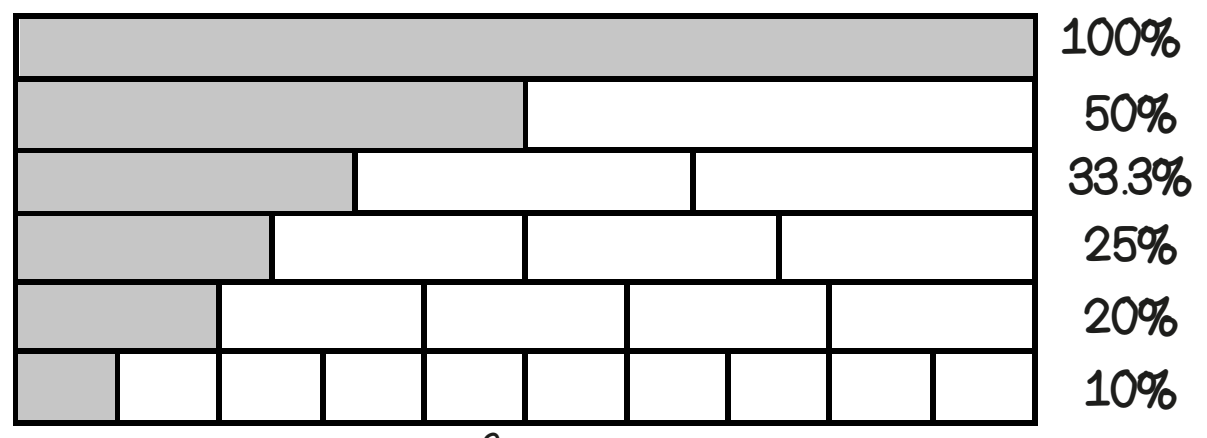
4200 x 4 = 16,800
 4000 + 200 = 16,800

$$\begin{array}{r} 1431 \\ 4 \overline{) 5724} \\ \underline{4} \\ 17 \\ \underline{16} \\ 20 \\ \underline{20} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

4960 ÷ 8 = 620
 600 x 8 20 x 8

Fractions, decimals and percentages

- 1 = $\frac{1}{1}$
- 0.5 = $\frac{1}{2}$
- 0.33... = $\frac{1}{3}$
- 0.25 = $\frac{1}{4}$
- 0.2 = $\frac{1}{5}$
- 0.1 = $\frac{1}{10}$



So 0.3 = 30% = $\frac{3}{10}$

Multiplying and dividing by 10, 100 and 1000

M	HTh	TTh	Th	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					1	3	6		
Ten times greater							←		
		1	3	6	0	0			
Ten times smaller							→		
						1	3	6	
Ten times smaller							→		
						0	1	3	6

13.6 x 10 move digits one place
 13.6 x 1000 move digits 3 places
 13.6 ÷ 10 move digits one place
 13.6 ÷ 100 move digits 2 places

Need to Know



- 1kg = 1000g
- 1km = 1000m
- 1l = 1000ml
- 1m = 100cm
- 1cm = 10mm

To find 10% of an amount divide by 10
 To find 1% of an amount divide by 100

Types of numbers

Prime numbers: exactly two factors:
 2, 3, 5, 7, 11, 13, 17, 19
 1 is not prime

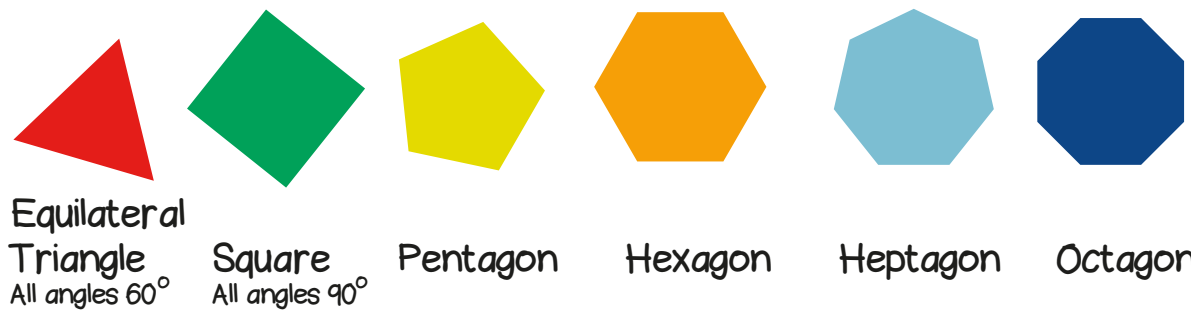
Factors: divide exactly into a number
 Factors of 12 are 1, 2, 3, 4, 6, 12

Square numbers: the result of multiplying a number by itself. 1, 4, 9, 16, 25, 36

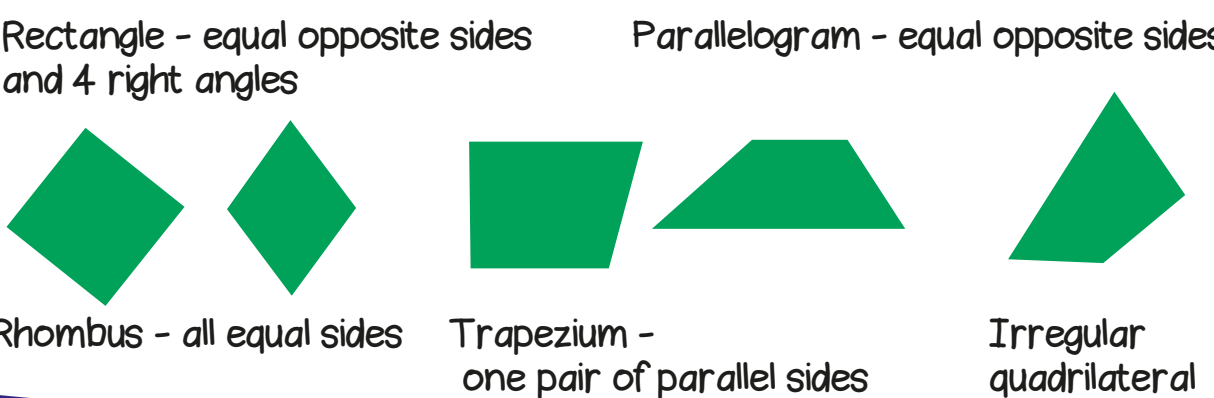
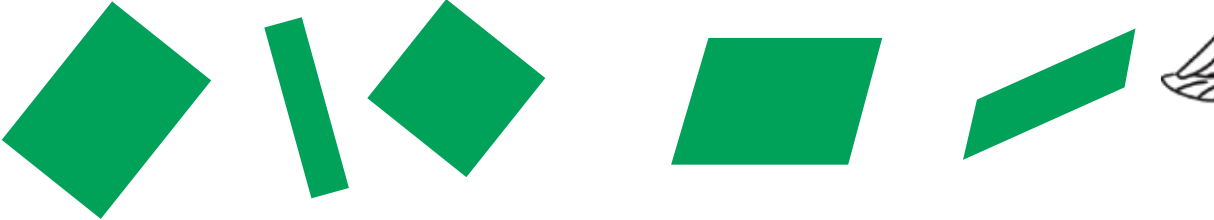
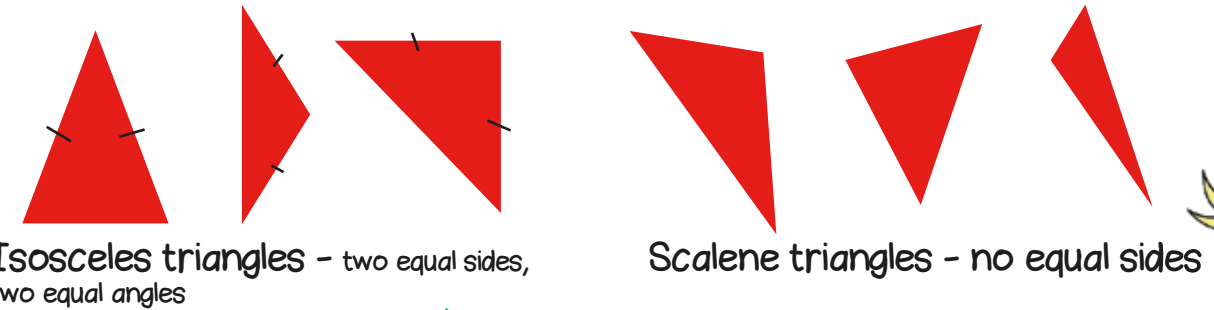
Multiples: the result of multiplying
 Multiples of 6 are 6, 12, 18, 24 ...



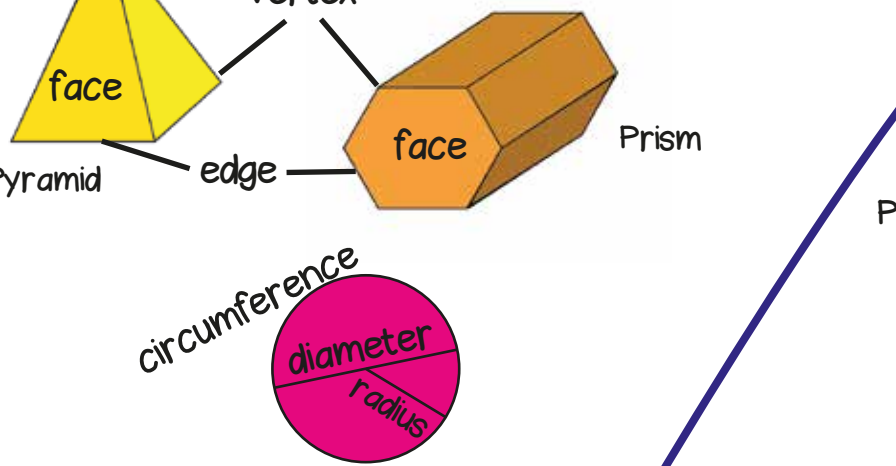
Regular Polygons - all sides and angles equal



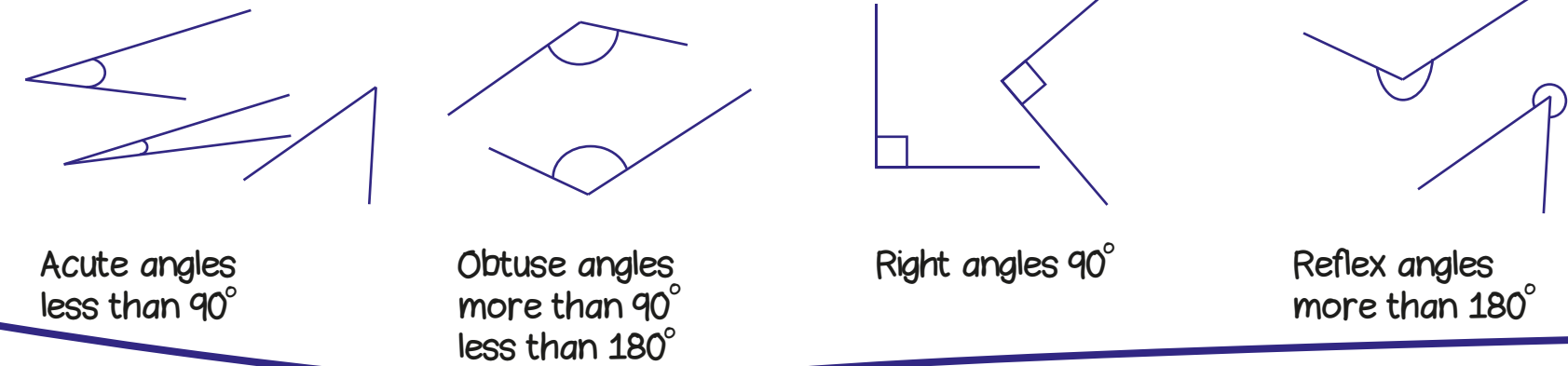
Irregular Polygons



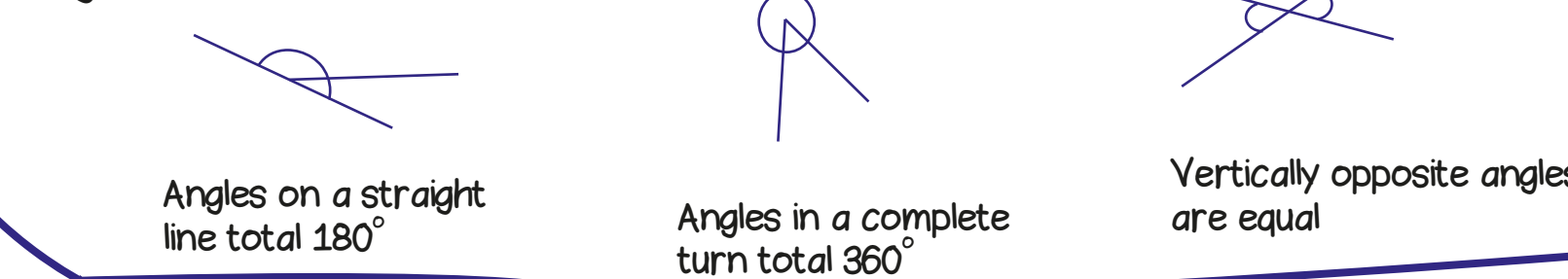
Vocabulary of shapes



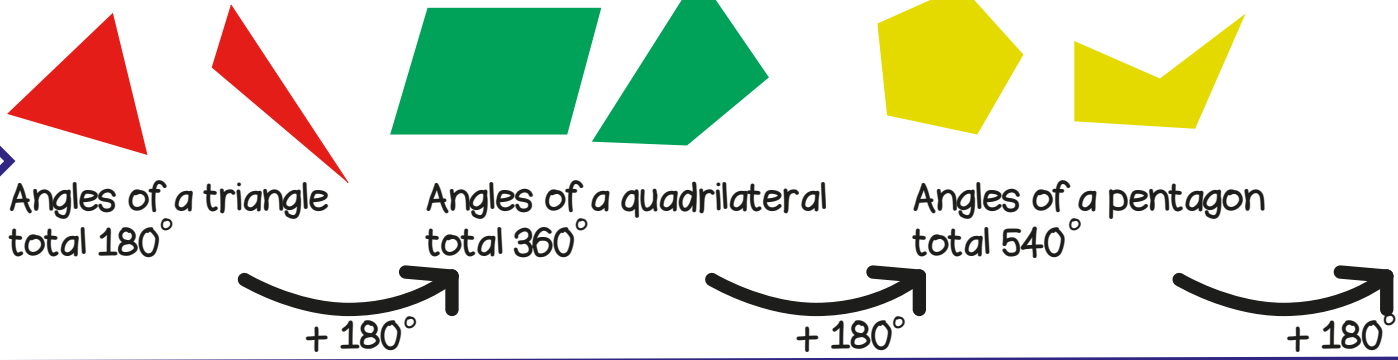
Types of angles



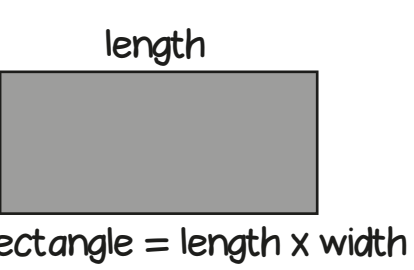
Angle facts



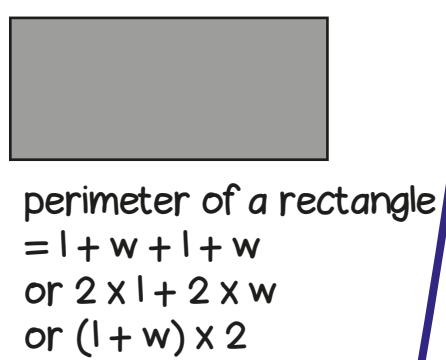
Need to Know



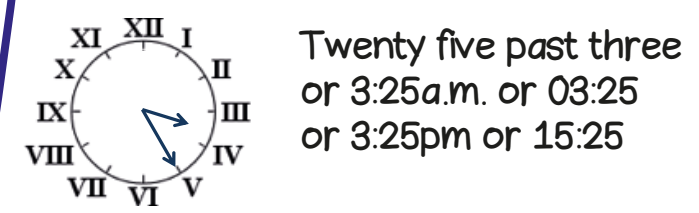
Area



Perimeter

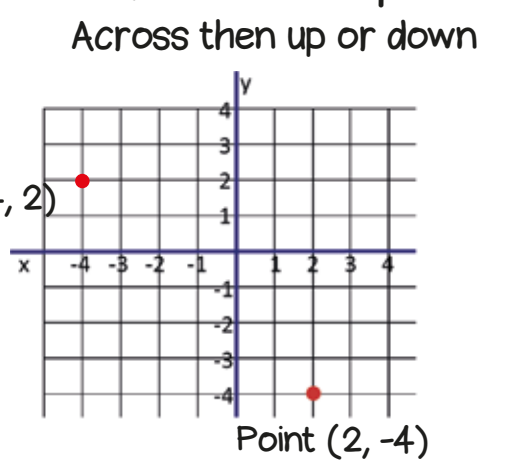


Time

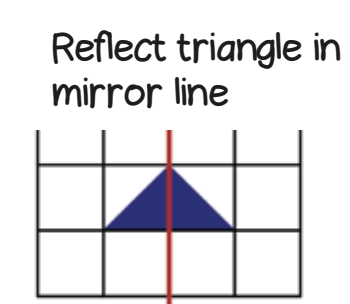


- January - 31 days
 - February - 28 or 29 days
 - March - 31 days
 - April - 30 days
 - May - 31 days
 - June - 30 days
 - July - 31 days
 - August - 31 days
 - September - 30 days
 - October - 31 days
 - November - 30 days
 - December - 31 days
- 1 year = 365 days
 - 1 year = 52 weeks
 - 1 week = 7 days
 - 1 day = 24 hours
 - 1 hour = 60 minutes
 - 1 minute = 60 seconds

Co-ordinates of points



Reflection



Translation

