

$$10^3 = 10 \times 10 \times 10 = 1000$$

$$\div 10$$

$$10^2 = 10 \times 10 = 100$$

$$\div 10$$

$$10^1 = 10$$

$$\div 10$$

$$10^0 = 1$$

$$\div 10$$

$$10^{-1} = \frac{1}{10} = 0.1$$

$$\div 10$$

$$10^{-2} = \frac{1}{100} = 0.01$$

standard form is a way of writing really large or really small **numbers**.

Standard form is written in the form:

$$a \times 10^n$$

a is a number greater than or equal to 1 but less than 10.
n can be any positive or negative integer.

Examples:

$$43,800,000 = 4.38 \times 10^7$$

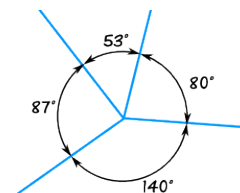
Positive power for a larger number.

$$0.00000832 = 8.32 \times 10^{-6}$$

Negative power for a small number.

around a point

Angles around a point sum to 360°

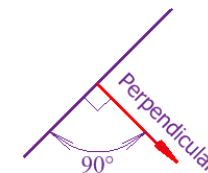


on a straight line

Angles at a point on a straight line sum to 180°

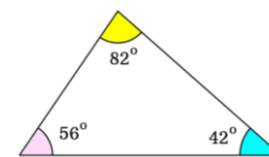
perpendicular

Lines that meet at 90° (a right angle)



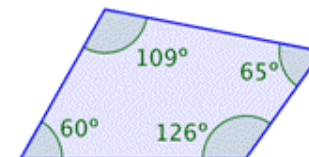
triangle (3 sided shape)

Sum of the interior angles is 180°



quadrilateral (4 sided shape)

Sum of the interior angles is 360°



4 Times Tables

1 x 4 = 4	4 x 4 = 16	7 x 4 = 28	10 x 4 = 40
2 x 4 = 8	5 x 4 = 20	8 x 4 = 32	11 x 4 = 44
3 x 4 = 12	6 x 4 = 24	9 x 4 = 36	12 x 4 = 48

5 Times Tables

1 x 5 = 5	4 x 5 = 20	7 x 5 = 35	10 x 5 = 50
2 x 5 = 10	5 x 5 = 25	8 x 5 = 40	11 x 5 = 55
3 x 5 = 15	6 x 5 = 30	9 x 5 = 45	12 x 5 = 60

7 Times Tables

1 x 7 = 7	4 x 7 = 28	7 x 7 = 49	10 x 7 = 70
2 x 7 = 14	5 x 7 = 35	8 x 7 = 56	11 x 7 = 77
3 x 7 = 21	6 x 7 = 42	9 x 7 = 63	12 x 7 = 84

Extension work – Codes for related Independent Learning tasks on [Sparx Maths](#) Click on 'Independent Learning' on home page then enter code in search box



M120 Index laws
M135 Calculating with powers and roots



M719 Standard form (positive)
M678 Standard form (negative)

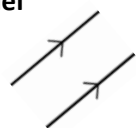



M818 Angles on a line & a point
M351 Angles in triangles
M679 Index rules (negative)

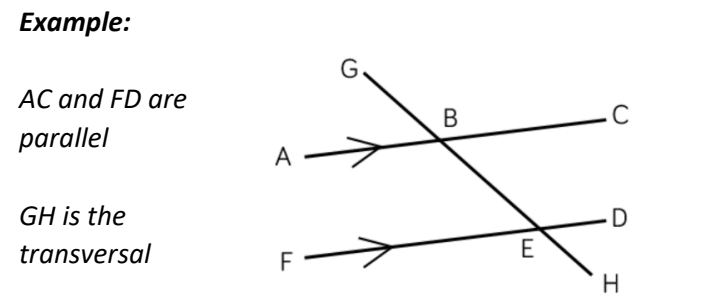
Week 4: Angles 2 – Parallel lines


Week 5: Trapezia

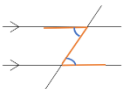
Week 6: Circles

parallel

 Lines that remain a constant distance apart – they never meet. Arrows show that lines are parallel.

transversal

 A straight line that intersects (crosses) a set of parallel lines.



corresponding angles

 Angles that are in the same position in the other set of angles.

alternate angles

 Angles that are in between the parallel lines but on opposite sides of the transversal.

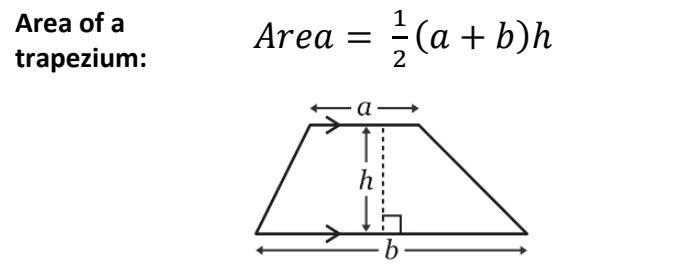
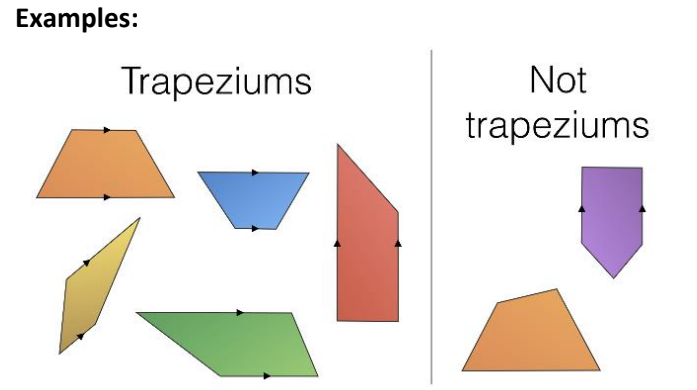
9 Times Tables

1 x 9 = 9	4 x 9 = 36	7 x 9 = 63	10 x 9 = 90
2 x 9 = 18	5 x 9 = 45	8 x 9 = 72	11 x 9 = 99
3 x 9 = 27	6 x 9 = 54	9 x 9 = 81	12 x 9 = 108

trapezia
 Trapezia is the plural (more than one) of the word **trapezium**.

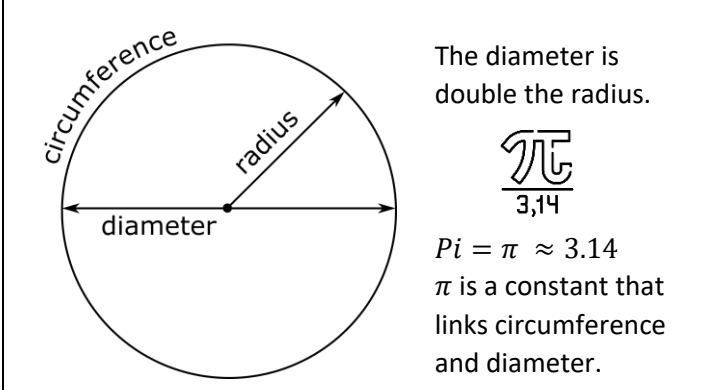
All trapezia have:

- four edges
- one pair of parallel sides



10 Times Tables

1 x 10 = 10	4 x 10 = 40	7 x 10 = 70	10 x 10 = 100
2 x 10 = 20	5 x 10 = 50	8 x 10 = 80	11 x 10 = 110
3 x 10 = 30	6 x 10 = 60	9 x 10 = 90	12 x 10 = 120



C $circumference = \pi \times diameter$

I↔ $area = \pi \times radius^2$

12 Times Tables

1 x 12 = 12	4 x 12 = 48	7 x 12 = 84	10 x 12 = 120
2 x 12 = 24	5 x 12 = 60	8 x 12 = 96	11 x 12 = 132
3 x 12 = 36	6 x 12 = 72	9 x 12 = 108	12 x 12 = 144

Extension work – Codes for related Independent Learning tasks on **Sparx Maths** Click on 'Independent Learning' on home page then enter code in search box

Sparx Maths

M606 Angles on parallel lines
M319 Combining angle facts

Sparx Maths

M705 Area of a trapezium
M303 Mixed area problems: rectangles, triangles, parallelograms, trapezia

Sparx Maths

M595 Parts of a circle
M169 Circumference
M231 Area of circles