## Standard Form, Angles in Parallel Lines, Angles in Polygons

Year 8

Term 5

(3) Convert Large Numbers to/from Standard Form



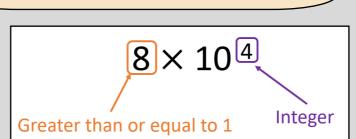


### (1) Key Terms

Integer	A positive or negative whole number. Zero is an integer.
Transversal	A line that crosses at least two other lines.
Corresponding Angles	A pair of angles in matching positions compared with a transversal.
Alternate Angles	A pair of angles between a pair of parallel lines on opposite sides of a transversal.
Co-interior Angles	A pair of angles between parallel lines on the same side of the transversal.

### (2) Display a number in Standard Form

A number written in standard form is written a x 10<sup>n</sup>

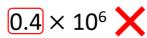


Are the numbers written in correct standard form?

 $2.5 \times 10^{8}$   $\sqrt{ }$ 

Less than 10





Write 64000 in standard form

6.4 x 10000

 $= 6.4 \times 10^4$ 

Be careful to write the correct number of zeros.



Write 3.52 x 10<sup>5</sup> as an ordinary number

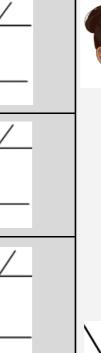
3.52 x 100000

= 352000

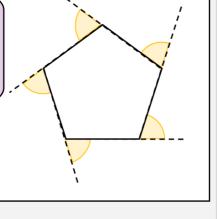
### (4) Angles in Parallel Lines

Corresponding Angles  are equal  a = b	a b
Alternate Angles  are equal  c = d	→ c d
Co-interior Angles  sum to $180^{\circ}$ $x + y = 180^{\circ}$	**************************************

### (5) Exterior Angles in a Polygon



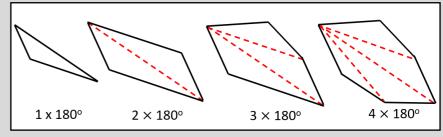
The sum of the exterior angles in any polygon is 360°



The sum of an exterior angle and an interior angle is 180°



# (6) Interior Angles in a Polygon



Shape	Sides	Angle Sum	
triangle	3	1 × 180°	180°
quadrilateral	4	2 × 180°	360°
pentagon	5	3 × 180°	540°
hexagon	6	4 × 180°	720°
n-agon	n	(n - 2) × 180°	

