

# SENIOR SCHOOL

preparing for the world

## IGCSE Mathematics Module 10

## Vectors and matrices

By the end of this unit we will have covered the following areas.

Objective	Revision Guide Ch.	Can do?	Ex. book page ref.	Revised?
<b>VECTORS</b>				
Describe a translation by using a vector and either $\overrightarrow{AB}$ or $\underline{a}$ notation	35			
Add and subtract vectors and multiply them by a scalar	35		250-255	
Use the sum and difference of two vectors to express given vectors in terms of two other vectors	35		255-259	
Calculate the magnitude of a vector and understand the modulus notation (e.g. $ \overrightarrow{AB} $ )	35		260-261	
Use position vectors	35		261-264	
<b>MATRICES</b>				
Display information in the form of a matrix	36			
Calculate the sum, difference and product of 2 matrices	36		274-276	
Know the zero and identity matrices	36		277	
Calculate the determinant and inverse $A^{-1}$ of a $2 \times 2$ matrix	36		277-278	
<b>TRANSFORMATIONS</b>				
Reflect simple figures in horizontal and vertical lines	37		279-281	
Rotate simple figures about a point through multiples of $90^\circ$	37		281-284	
Construct translations and enlargements of simple figures	37		284-288	
Construct shears and stretches of simple figures	37		298-299	
Recognise and describe translations, reflections, rotations, enlargements, shears and stretches	37		p.p.	
Describe transformations using coordinates and matrices	37		297-299-	
Perform transformations from given matrices	37		292-297	

### Vocabulary:

