

4-6I Evaluation- Transformations of Sinusoidal Functions**KNOWLEDGE****/24****KNOWLEDGE****24 MARKS**

For the following functions, determine the amplitude, period, complete transformations, domain and range, and then sketch one cycle of the graph.

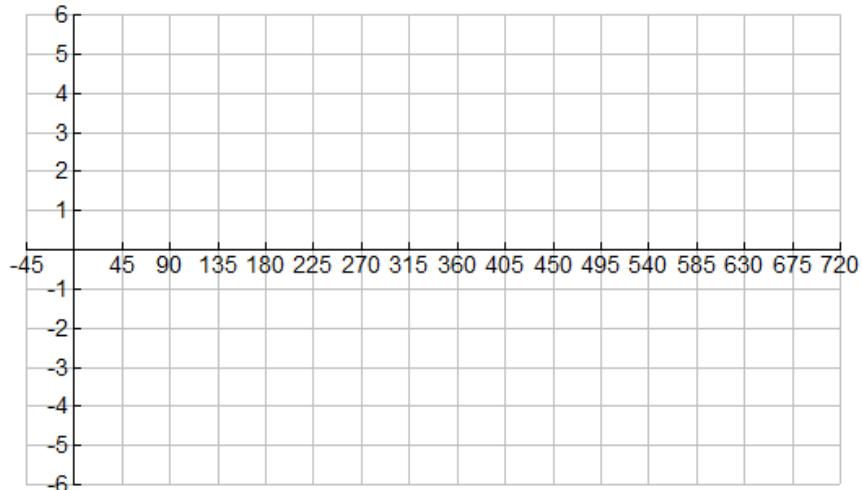
Marking Scheme (out of 12 marks each)

- 1 mark for the amplitude
- 1 mark for the period
- 4 marks for the complete transformations
- 1 mark for the domain
- 1 mark for the range
- 2 marks to transform the 5 key points listed below
- 2 marks to sketch the graph of the function

$$y = 3 \sin \left[\frac{1}{2}(x + 45^\circ) \right] + 1$$

Amplitude	Period	Domain	Range
List (in words) the complete transformations			

x	y	→		
0		→		
90		→		
180		→		
270		→		
360		→		



$y = 2 \cos[3(x - 30^\circ)] + 2$			
Amplitude	Period	Domain	Range
List (in words) the complete transformations			

x	y	→		
0		→		
90		→		
180		→		
270		→		
360		→		

