

Problem 1

	A	B	C	D
=				
1	a		2	
A1	a			

$$y = 2 \sin(-3x + 225) + 3$$

$$y = 2 \sin(-3(x - 75)) + 3$$

Period [75, 195.) Range [1, 5]

Amplitude 2 Equation of Midline $y = 3$

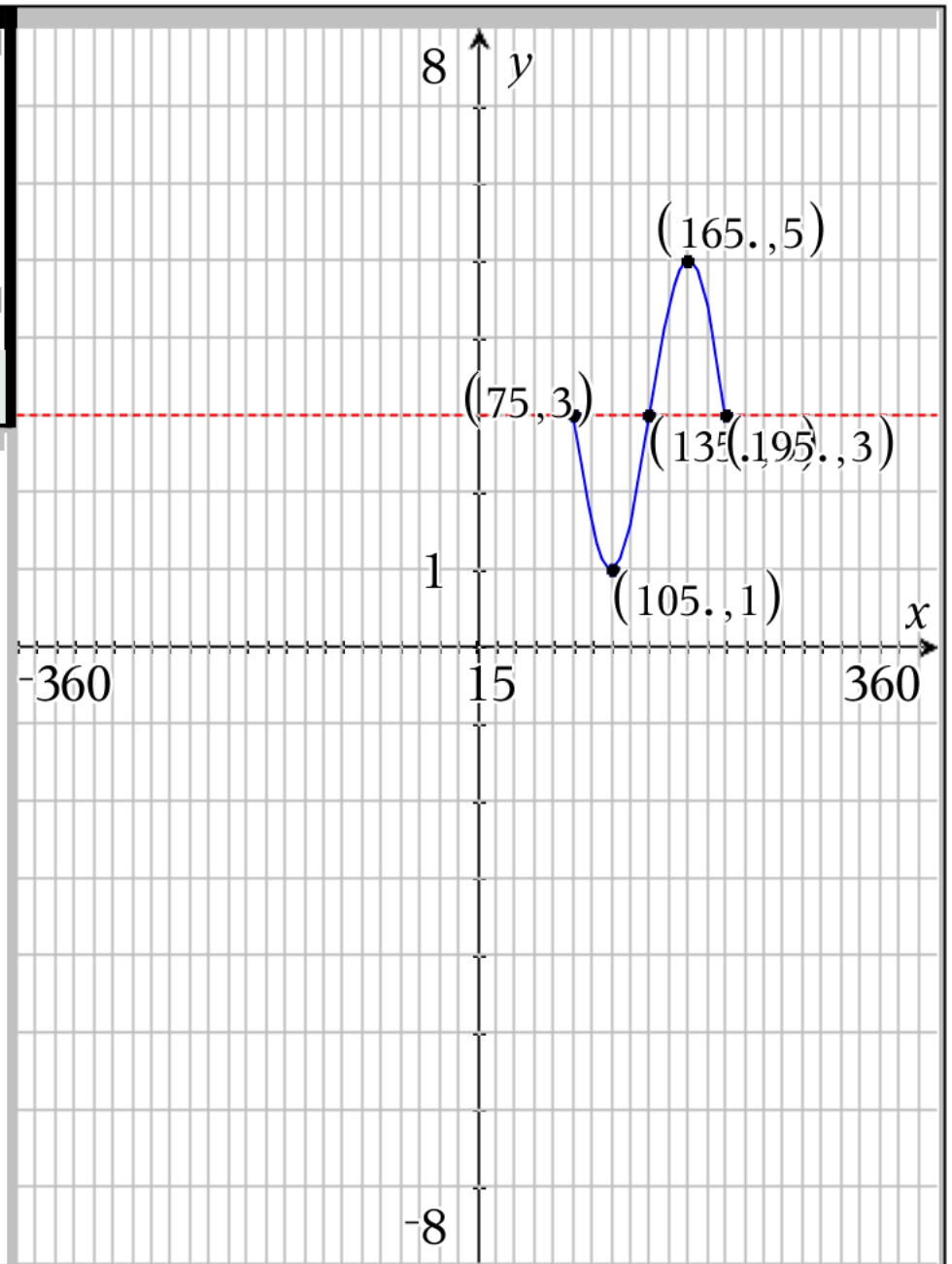
horizontal shift SHIFT RIGHT

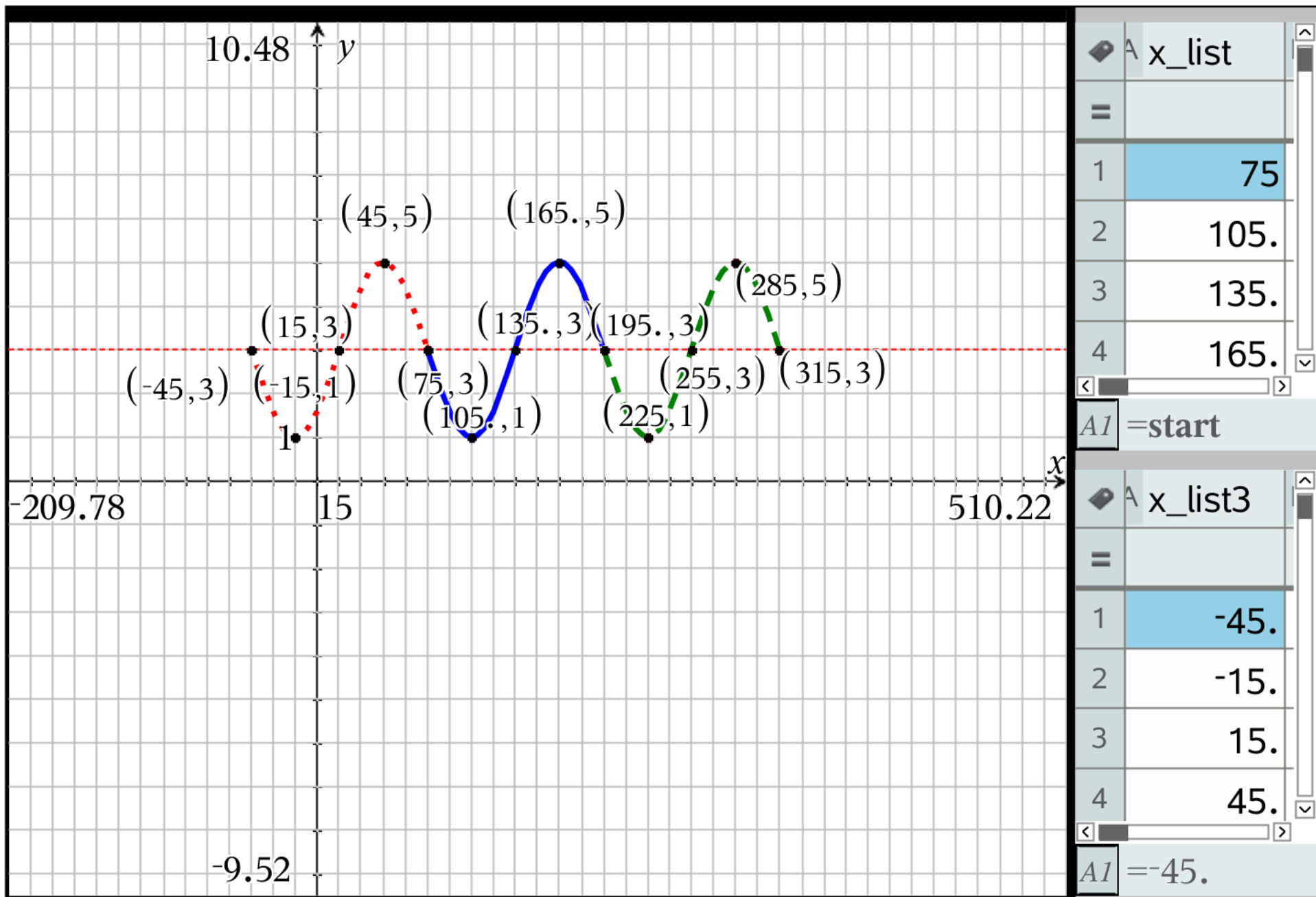
vertical shift SHIFT UP

compress horizontally

stretch vertically

Reflection? horizontally over y axis



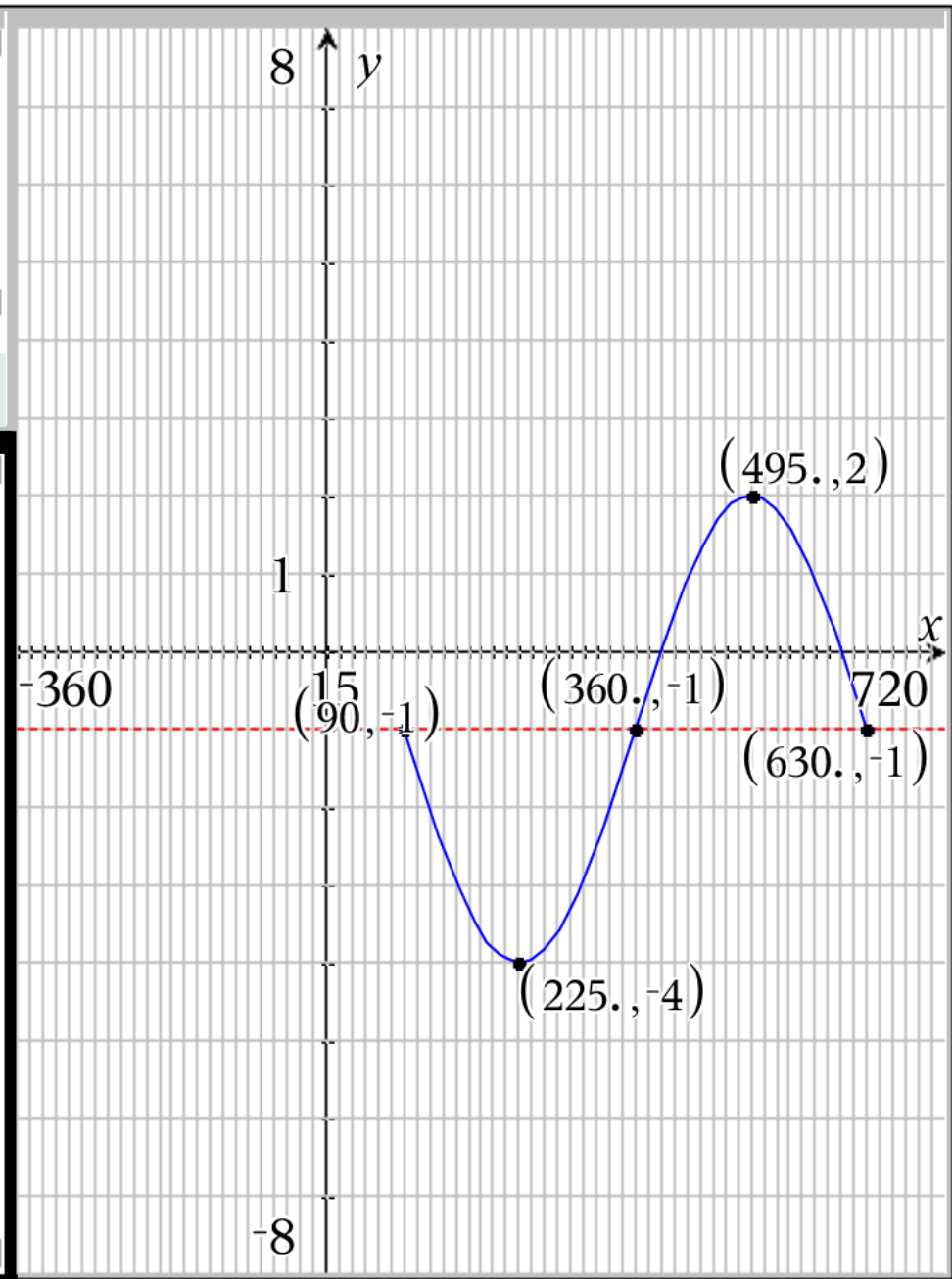


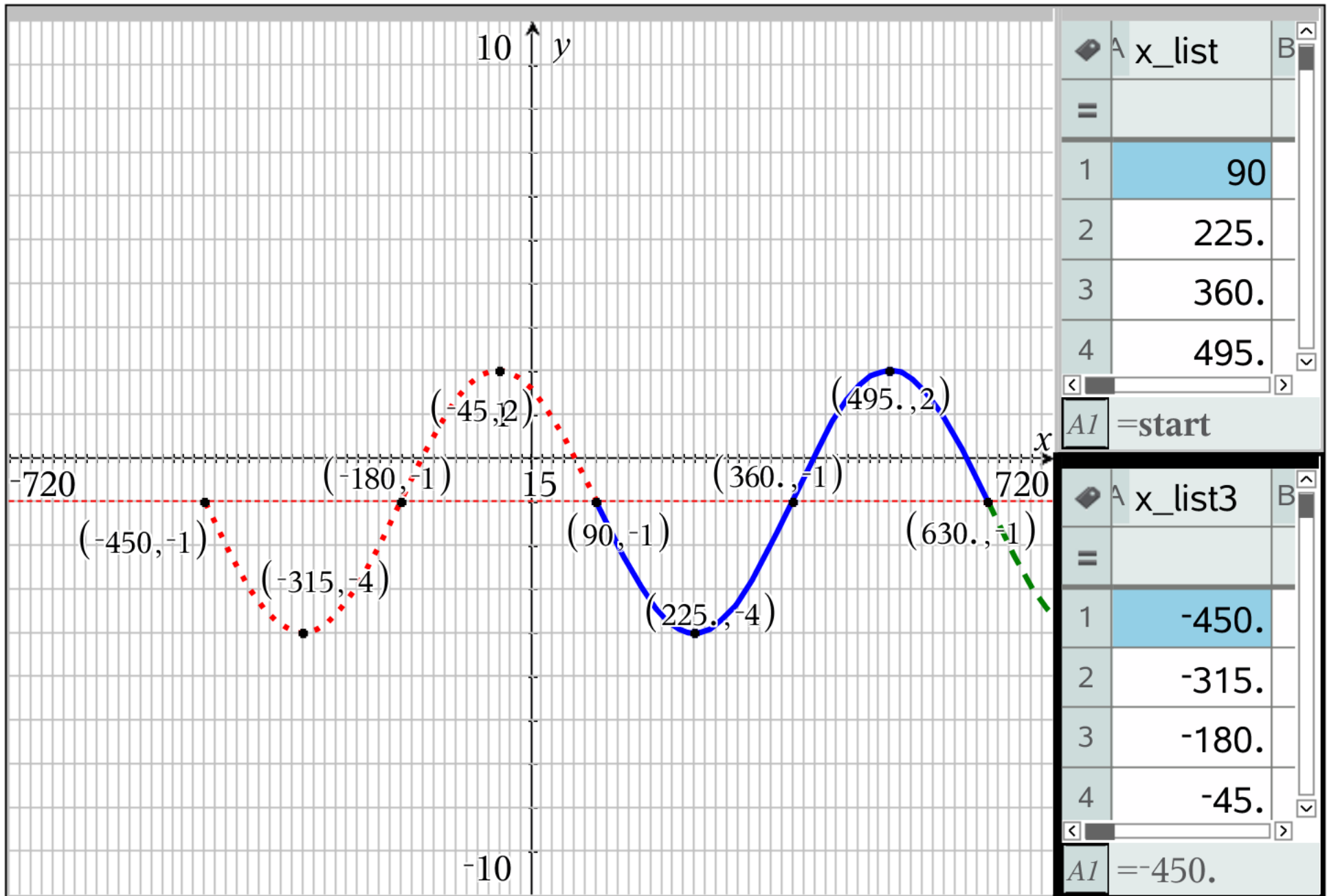
Problem 2

	A	B	C	D
=				
1	a		-3	

A1 a

$y = -3 \sin\left(\frac{2}{3}x - 60\right) - 1$
 $y = -3 \sin\left(\frac{2}{3}(x - 90)\right) - 1$
 Period [90 , 630.) Range [-4 , 2]
 Amplitude 3 Equation of Midline $y = -1$
 horizontal shift SHIFT RIGHT
 vertical shift SHIFT DOWN
 stretch horizontally
 stretch vertically
 Reflection? Vertical over x axis





Problem 3

