CW 17.4-17.5 on Sinusoidals Can Write on.

For #'s 1 and 2, state the amplitude, the period, phase shift, and vertical shift. For #2, also write a sine and a cosine equation based on the window that the graph is shown.

1. $y = -2\sin(4x + 40^{\circ}) + 3$		
	Amplitude:	
	Period:	
	Phase Shift:	
2.	Vertical Shift:	
\downarrow^y	Amplitude:	
$\frac{1}{3}$	Period:	
	Phase Shift if sine:	
$-\frac{2\pi}{3} \qquad \frac{\pi}{3} \qquad \frac{4\pi}{3} \qquad \frac{7\pi}{3} \qquad \frac{10\pi}{3} x$	Phase Shift if cosine:	
	Vertical Shift:	
3	Sine Equation:	
	Cosine Equation:	
Graph the following. Provide one positive and one negative cycle for each. Label your scale legibly.		
3. $y = 3\sin\left(\frac{x}{3} + 10^{\circ}\right) + 2$ (Be careful with your phase shift)		A =
		B =
		C =
		D =
		au =
		$\triangle Q =$
		~
$4. y = 2\cos 4 \left(x + \frac{\pi}{3} \right) - 4$		A =
		B =
		C =
		D =
		au =
		${\scriptstyle riangle Q} =$
		1