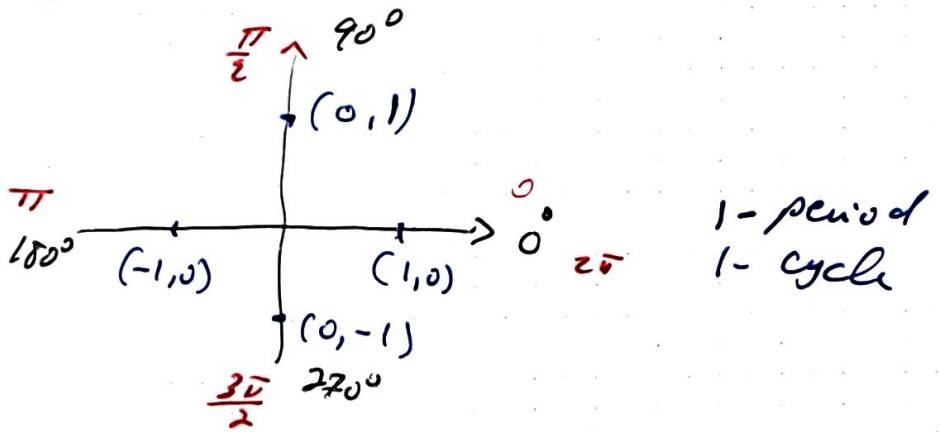
Lecture (7) 3rd

$$\left.\begin{array}{l} y = A\cos(Bx+C)+D \\ y = A\sin(Bx+C)+D \end{array}\right\}$$



A: Amplitude $= |A|$

Period: $P = \frac{2\pi}{|B|}$

Phase shift: $\varphi = -\frac{C}{B} = -C\left(\frac{1}{B}\right)$

Vertical Translation (V.T.): $y = D$

x	Cosine	Sine
$0 + \varphi$	$A+D$	$0+D$
$\frac{1}{4}P + \varphi$	$0+D$	$A+D$
$\frac{1}{2}P$	$-A+D$	$0+D$
$\frac{3}{4}P$	$0+D$	$-A+D$
P	$A+D$	$0+D$