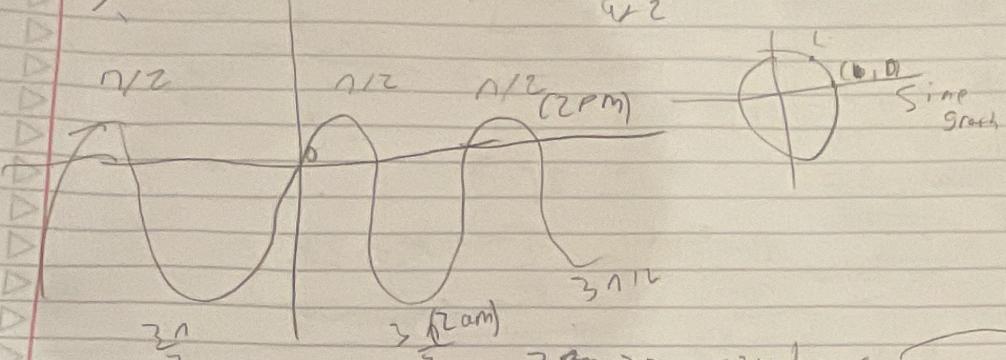


1. Time ~~Recurrence~~ outside sine,
Strength min of $a_1 z$ & max of $b_1 z$



Newton's law of cooling says it goes from

$$\frac{dk}{dr} = f(M-1)$$

Time
disregard
for sun

$$2PM \rightarrow 2PM = 24 \text{ hours}$$

$$2 \text{ hr} = \text{midnight}$$

$$4 \text{ hr} = \text{max 1 cycle}$$

$2(2)$

$(4-2) = 4$

at 2 hours

$$so at 2 \text{ hr}, = 12 + n$$

+12 for lowest
highs

24 hours

& 22 degrees

$$so \frac{2n}{24} = \frac{12}{22} so + \frac{n}{11}$$

$$\frac{10}{11} = 12n/11$$

$$17 = 12n/11$$

$$834$$

$H(4-2) = 8$ & max

or 7 hours & max - 1

$$= \frac{m^2}{2} - \frac{j^2}{2}$$

$$= 42 - 2 = 8-2$$

$$= 2 = 6$$

$$= 34 + 6$$

$$= 40/20$$

$\sqrt{k(m+1)} dt$

$$2. x^7 e^{-3x} \sin(14x) = a' + b' + c'$$

$$= x^7 e^x a'$$

$$a' = 7x^6, b' = -3e^{-3x}, c'$$

$$-7y \cos(14x)$$

$\Re(a)z$

$$= 12 + 6$$

$$= 18, 6$$

2. Derivatives for $x^7 - 7x^7$
 $e^{-5x} \rightarrow$ factor of $b + 5 - 3e^{-3x}$
 $\sin(4x) =$ frequency is $14 \rightarrow 14 \text{ oscillations}$