1) 
$$1+\cos 7\theta = (23-2^2-2x+1)^2$$
 Name: Parget singh  
 $1+\cos \theta$  (To Prove) Roll no: 16010121045  
Batch: A2  
Given  $2 = 2\cos \theta$  Tutorial: 4

LHS: 
$$1+\cos 7\theta \Rightarrow 2\cos^2\left(\frac{7\theta}{2}\right)$$
 (:  $1+\cos \theta = 2\cos^2\theta/2$ )
$$1+\cos \theta \Rightarrow 2\cos^2\left(\frac{\theta}{2}\right)$$

$$\Rightarrow \left(\sin\left(\frac{7\theta}{2} + \frac{\theta}{c}\right) - \sin\left(\frac{7\theta}{2} - \frac{\theta}{2}\right)\right)^{2} (: \sin c \theta - \sin \theta)$$

$$\Rightarrow \sin^{2}\theta = 2 \sin c \cos \theta$$

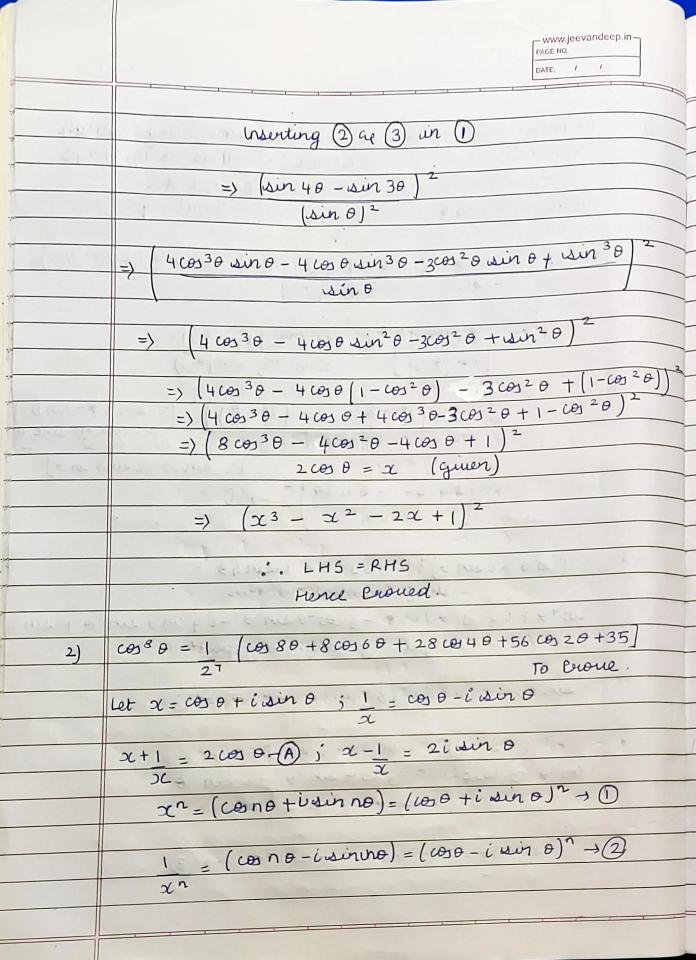
$$\Rightarrow \left(\sin 4\theta - \sin 3\theta\right)^{2} \rightarrow 0$$

$$\Rightarrow \sin \theta$$

$$\sin 3\theta$$
  $\xrightarrow{2}$   $\rightarrow 0$ 

 $(\cos\theta + i\sin\theta)^4 = \cos4\theta + i\sin4\theta$ 

$$\sin 3\theta = 3(\theta)^2 \theta \sin \theta - \sin^3 \theta \rightarrow 3$$



PAGE NO.

$$\frac{1}{3} \cdot \frac{3}{3} \cdot \frac{3}{3}$$

$$\left(\begin{array}{c} (x+1)^n = (2\cos\theta)^n \end{array}\right)$$
 (Even A)

For n = 8

$$(2 \cos \theta)^8 = (x + 1)^8$$

$$2^{8} \cos^{8} \theta = x^{8} + 8x^{6} + 28x^{4} + 56x^{2} + 70 + 561$$

$$\frac{2^{8}(0)^{8}\theta}{x^{8}} = \frac{1}{x^{8}} + \frac{1}{x^{6}} + \frac{1}{x^{6}} + \frac{1}{x^{4}} + \frac{1}{x^{4}}$$

$$+56(x^2+1)+70$$

Erom 3

$$2^{8} (\Theta)^{8} \Theta \Rightarrow 2 (\Theta) 8\theta + 8 (2 (\Theta) 6\theta) + 28 (2 (\Theta) 4\theta) + 56 (2 (\Theta) 2\theta) + 70.$$

duriding both sides by 2

$$\cos^8\theta = 1$$
  $\cos^8\theta + 8\cos^6\theta + 28\cos^4\theta + 56\cos^2\theta + 35$ 

ALLUS PHS

Hence Proved.

933 = 0

.. The inverse of matrice 5 excists.

 $M_{33} = \begin{cases} 0 & 1 \\ 1 & 2 \end{cases} = -1 A_{33} = \begin{pmatrix} -1 \\ 1 \end{pmatrix} \begin{pmatrix} -1 \\ 1 \end{pmatrix}$ 

