	[ Mathematica file > ]			
	Section B (b) ("Normal vector to swifted of Bheroid.")			
	NORMAL VECTOR CALCULATION			
	O SURFACE OF SPHEROID ->			
<b>b</b>	The position vector to surface of spheroid can be weitten as,			
	$\vec{v}(0, \varphi) = \vec{v}(0, \varphi) \hat{\vec{v}}$ — Db where $\vec{v}(0, \varphi)$ is parametrization of the surface.			
	for spheroid, $r(0,q) = r(0) = R - Rs cos (20)$			
	for spheroid, $r(0,q) = r(0) = R - Rs \cos(20)$ which is given in eq 15a.			
<b>+</b>	normal vector to any arbitrary sweface with position vector $\overline{u}(0, \varphi)$ is given by			
	$\overrightarrow{n} = \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \varphi} \times \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \varphi} - 2b$			
	n   =   2v(0, q) x 2v(0, q) - 3b			
	as we know, $\hat{n} = \vec{n}$			
	[Ref: - Vector Calculus, 6th Edition]			
	[Ref:-Vector Calculus, 6th Edition] by Jarvold & Marsolen Pg-379 (Parametrized Eurfaces)			
	19 - 313 (Parameto izea aurifaca)			

Calculating normal vector,

$$\frac{\partial \vec{v}(0, \varphi)}{\partial \theta} = \frac{\partial r(0, \varphi)}{\partial \theta} \hat{r} + r(\theta, \varphi) \frac{\partial \hat{r}}{\partial \theta} - \frac{4}{6}b$$
 $\frac{\partial \vec{v}(0, \varphi)}{\partial \theta} = \frac{\partial r(0, \varphi)}{\partial \theta} \hat{r} + r(\theta, \varphi) \frac{\partial \hat{r}}{\partial \theta} - \frac{6}{6}b$ 

as we know, 
$$\frac{\partial \hat{r}}{\partial \theta} = \hat{\theta}$$
,  $\frac{\partial \hat{r}}{\partial \theta} = \frac{\partial \sin \theta}{\partial \theta} = \frac{\partial \cos \theta}{\partial \theta}$ 

$$\frac{\partial \vec{V}(0, \varphi)}{\partial \theta} = \frac{\partial r(0, \varphi) \hat{r} + r(0, \varphi) \hat{\Theta}}{\partial \theta} = \frac{\partial \vec{V}(0, \varphi)}{\partial \theta}$$

$$\frac{\partial \vec{v}(0, \varphi)}{\partial \varphi} = \frac{\partial r(0, \varphi)}{\partial \varphi} \hat{r} + r(0, \varphi) \sin \varphi \hat{\varphi} - 86$$

$$\overrightarrow{n} = \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \theta} \times \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \varphi}$$

$$\overrightarrow{n} = -\frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \theta} \times \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \theta} + \frac{\partial \overrightarrow{v}(0, \varphi)}{\partial \varphi} + \frac{\partial \overrightarrow$$

for Spheroid, 
$$\gamma(0,q) = \gamma(0) = R - Rs \cos(20)$$

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	Substituting the variables in eq10 b to eq3b, normal vector can be given as,
	normal vector can be given as,
	$\frac{\pi_{spheroid} = (\tau(0))^2 \sin \theta \hat{\gamma} - \tau(\theta) 2 \sin \theta \sin (20) Rs \hat{\theta}}{+ 0 \hat{\phi}} - \frac{10}{10} b$
	109
	(R-Rs cos (20)) (g
	(12)
-	n=n'- (R-Rs cos (20)) 3in 0 f-4Rs cos 0 sin 0 n
	$\hat{n} = \hat{n}' - (R - Rs \cos(20))^2 \sin \theta \hat{\tau} - 4Rs \cos \theta \sin^2 \theta $ $  n   \qquad (R - Rs \cos(20)) \theta$
	(R-Rs cos (20)) 4 sin 20 + 16 R3 2 cos 20 sin 40 (R-Rs cos (20)) 2
	(R-R3 063(26))
	<u></u>
	n = (R-Rs cos (20)) sin 0 r - 4Rs cos 0 sin 20 (R-Rs cos (20)) 0
-	[(R-Rs Cos (20)) 48in 20 + 16 R2s 2000 0 8in 40 (R-Rs Cos (20))
-	
-	L-(14) b
	(R-RSCOO(20))28in02-4RSCOOOSin20 (R-RSCOO(20))20
	(R-RSCOS (20)) Sin 0 (R-RS COS (20)) + 16 R25 2 COS O Sin 20
	L(15) b

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$$\hat{n} = (R - Rs \cos(20))\hat{s} - 4Rs \cos 3\sin 0\hat{g} - (B)\hat{b}$$

$$\sqrt{(R - Rs \cos(20))^2 + 4R^2s^2 \sin^2(20)}$$

n represents the unit normal vertor