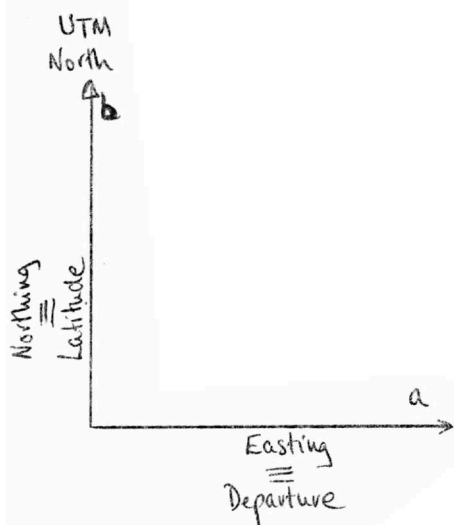


## GRUM

CONVERSION OF U.T.M. COORIDINATES  
TO K.A. COORIDINATES



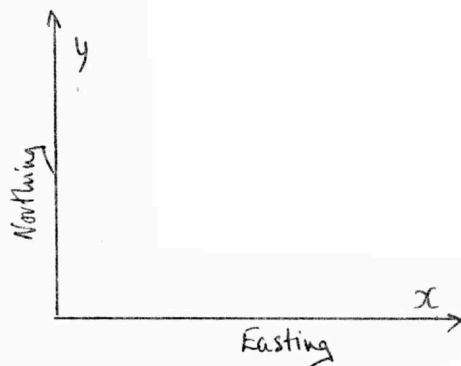
$$y = -877,600.07 + (b \cdot \cos \theta) - (a \cdot \sin \theta)$$

$$y = \text{K.A. northing}$$

$$x = -609,322.18 + (a \cdot \cos \theta) - (b \cdot \sin \theta)$$

$$x = \text{K.A. easting}$$

K.A. North



$$\text{where } \theta = 1^{\circ} 34' 25'' \equiv 1.5736111^{\circ}$$

$$\therefore \cos \theta = 0.9996229$$

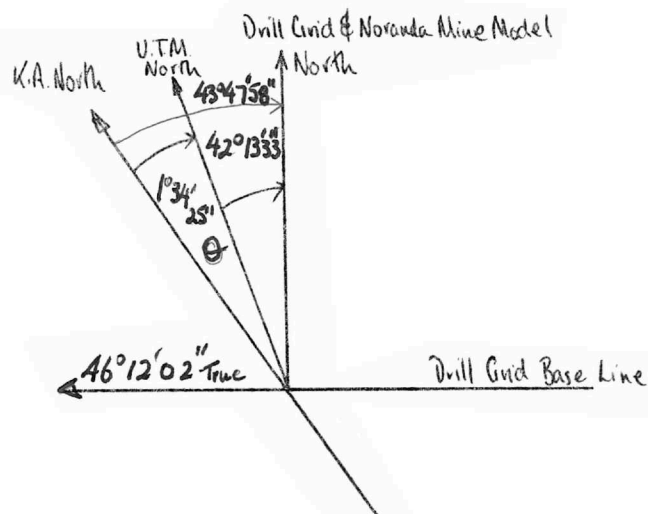
$$\& \sin \theta = 0.0274612$$

1:10,000 accuracy

N.B. for U.T.M. northing

eg. 6,905,000 remove the 6 million for the above formula

i.e. it reads 905,000



RST 81'