

Trigonometry of Angles

We will now apply the CAST rule and the concept of related angles in order to solve basic trigonometric equations.

Example 1 If $\sin \alpha = 0.7859$, find the values of α , where $0 \leq \alpha \leq 360^\circ$.

Example 2 If $\cos \beta = 0.8192$, find the values of β , where $0 \leq \beta \leq 360^\circ$.

Example 3 If $\tan \theta = \frac{1}{\sqrt{3}}$, find the values of θ , where $0 \leq \theta \leq 360^\circ$.

Example 4 If $\sin \beta = -0.8923$, find the values of β , where $0 \leq \beta \leq 360^\circ$.