



## Trigonometry - Calculating Angles from Ratios (to -1 Notation)



**1** How would you calculate the angle, using -1 notation?  $\tan(\alpha) = 1.664$

A  $\alpha = \frac{1}{\tan(1.664)}$

B  $\alpha = \frac{1}{\tan^{-1}(1.664)}$

C  $\alpha = \tan(1.664) - 1$

D  $\alpha = \tan^{-1}(1.664)$

**2** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.799$

A  $\alpha = \cos(0.799) - 1$

B  $\alpha = \frac{1}{\cos^{-1}(0.799)}$

C  $\alpha = \frac{1}{\cos(0.799)}$

D  $\alpha = \cos^{-1}(0.799)$

**3** How would you calculate the angle, using -1 notation?  $\tan(\alpha) = 0.532$

A  $\alpha = \frac{1}{\tan(0.532)}$

B  $\alpha = \frac{1}{\tan^{-1}(0.532)}$

C  $\alpha = \tan(0.532) - 1$

D  $\alpha = \tan^{-1}(0.532)$

**4** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.545$

A  $\alpha = \frac{1}{\cos^{-1}(0.545)}$

B  $\alpha = \cos(0.545) - 1$

C  $\alpha = \frac{1}{\cos(0.545)}$

D  $\alpha = \cos^{-1}(0.545)$

**5** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.743$

A  $\alpha = \frac{1}{\cos(0.743)}$

B  $\alpha = \cos^{-1}(0.743)$

C  $\alpha = \frac{1}{\cos^{-1}(0.743)}$

D  $\alpha = \cos(0.743) - 1$

**6** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.407$

A  $\alpha = \cos^{-1}(0.407)$

B  $\alpha = \frac{1}{\cos(0.407)}$

C  $\alpha = \frac{1}{\cos^{-1}(0.407)}$

D  $\alpha = \cos(0.407) - 1$

**7** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.669$

A  $\alpha = \cos^{-1}(0.669)$

B  $\alpha = \cos(0.669) - 1$

C  $\alpha = \frac{1}{\cos^{-1}(0.669)}$

D  $\alpha = \frac{1}{\cos(0.669)}$

**8** How would you calculate the angle, using -1 notation?  $\cos(\alpha) = 0.719$

A  $\alpha = \frac{1}{\cos(0.719)}$

B  $\alpha = \frac{1}{\cos^{-1}(0.719)}$

C  $\alpha = \cos^{-1}(0.719)$

D  $\alpha = \cos(0.719) - 1$