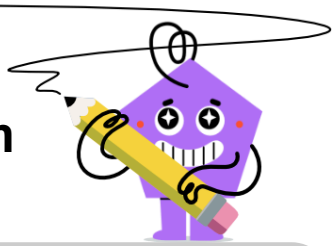
Name

Trigonometry - Calculating Angles from Ratios (to Arc Notation)



1 How would you calculate the angle, using arc notation? $\sin(\alpha) = 0.906$

A $\alpha = \frac{1}{\text{asin}(0.906)}$

B $\alpha = \sin(0.906) - 1$

C $\alpha = \frac{1}{\sin^{-1}(0.906)}$

D $\alpha = \text{asin}(0.906)$

2 How would you calculate the angle, using arc notation? $\tan(\alpha) = 2.05$

A $\alpha = \frac{1}{\text{atan}(2.05)}$

B $\alpha = \text{atan}(2.05)$

C $\alpha = \tan(2.05) - 1$

D $\alpha = \frac{1}{\tan^{-1}(2.05)}$

3 How would you calculate the angle, using arc notation? $\sin(\alpha) = 0.978$

A $\alpha = \sin(0.978) - 1$

B $\alpha = \text{asin}(0.978)$

C $\alpha = \frac{1}{\sin^{-1}(0.978)}$

D $\alpha = \frac{1}{\text{asin}(0.978)}$

4 How would you calculate the angle, using arc notation?

$$\tan(\alpha) = 0.7$$

A $\alpha = \text{atan}(0.7)$

B $\alpha = \frac{1}{\text{atan}(0.7)}$

C $\alpha = \frac{1}{\tan^{-1}(0.7)}$

D $\alpha = \tan(0.7) - 1$

5 How would you calculate the angle, using arc notation? $\sin(\alpha) = 0.259$

A $\alpha = \text{asin}(0.259)$

B $\alpha = \frac{1}{\sin^{-1}(0.259)}$

C $\alpha = \frac{1}{\text{asin}(0.259)}$

D $\alpha = \sin(0.259) - 1$

6 How would you calculate the angle, using arc notation? $\cos(\alpha) = 0.866$

A $\alpha = \frac{1}{\cos^{-1}(0.866)}$

B $\alpha = \cos(0.866) - 1$

C $\alpha = \text{acos}(0.866)$

D $\alpha = \frac{1}{\text{acos}(0.866)}$

7 How would you calculate the angle, using arc notation? $\cos(\alpha) = 0.883$

A $\alpha = \cos(0.883) - 1$

B $\alpha = \frac{1}{\text{acos}(0.883)}$

C $\alpha = \frac{1}{\cos^{-1}(0.883)}$

D $\alpha = \text{acos}(0.883)$

8 How would you calculate the angle, using arc notation? $\cos(\alpha) = 0.122$

A $\alpha = \frac{1}{\cos^{-1}(0.122)}$

B $\alpha = \text{acos}(0.122)$

C $\alpha = \frac{1}{\text{acos}(0.122)}$

D $\alpha = \cos(0.122) - 1$