Math worksheet on *'Trigonometry - Calculating Angles from Ratios (to Arc Notation) (Level 1)'*. Part of a broader unit on *'Trigonometry Fundamentals - Intro'*

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1

How would you calculate the angle, using arc notation? $\sin(\alpha) = 0.961$

a $\alpha = \frac{1}{\sin^{-1}(0.961)}$

b $\alpha = \frac{1}{\text{asin}(0.961)}$

c $\alpha = \text{asin}(0.961)$

d $\alpha = \sin(0.961) - 1$

2

How would you calculate the angle, using arc notation? $\cos(\alpha) = 0.961$

a $\alpha = \frac{1}{\text{acos}(0.961)}$

b $\alpha = \text{acos}(0.961)$

c $\alpha = \frac{1}{\cos^{-1}(0.961)}$

d $\alpha = \cos(0.961) - 1$

3

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

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

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

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

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

4

How would you calculate the angle, using arc notation? $\cos(\alpha) = 0.921$

a $\alpha = \text{acos}(0.921)$

b $\alpha = \frac{1}{\cos^{-1}(0.921)}$

c $\alpha = \frac{1}{\text{acos}(0.921)}$

d $\alpha = \cos(0.921) - 1$

5

How would you calculate the angle, using arc notation? $\tan(\alpha) = 0.306$

a $\alpha = \tan(0.306) - 1$

b $\alpha = \frac{1}{\tan^{-1}(0.306)}$

c $\alpha = \text{atan}(0.306)$

d $\alpha = \frac{1}{\text{atan}(0.306)}$

6

How would you calculate the angle, using arc notation? $\tan(\alpha) = 1.28$

a $\alpha = \frac{1}{\tan^{-1}(1.28)}$

b $\alpha = \tan(1.28) - 1$

c $\alpha = \text{atan}(1.28)$

d $\alpha = \frac{1}{\text{atan}(1.28)}$

7

How would you calculate the angle, using arc notation? $\sin(\alpha) = 0.656$

a $\alpha = \text{asin}(0.656)$

b $\alpha = \sin(0.656) - 1$

c $\alpha = \frac{1}{\text{asin}(0.656)}$

d $\alpha = \frac{1}{\sin^{-1}(0.656)}$