Math worksheet on *'Trigonometry - Calculating Angles from Ratios (Words 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?

α has a sin of 0.391

a	$\alpha = \frac{1}{\sin^{-1}(0.391)}$	**b**	$\alpha = \text{asin}(0.391)$
c	$\alpha = \frac{1}{\text{asin}(0.391)}$	**d**	$\alpha = \sin(0.391) - 1$

2 How would you calculate the angle using arc notation?

α has a cos of 0.755

a	$\alpha = \text{acos}(0.755)$	**b**	$\alpha = \frac{1}{\text{acos}(0.755)}$
c	$\alpha = \cos(0.755) - 1$	**d**	$\alpha = \frac{1}{\cos^{-1}(0.755)}$

3 How would you calculate the angle using arc notation?

α has a cos of 0.602

a	$\alpha = \text{acos}(0.602)$	**b**	$\alpha = \frac{1}{\text{acos}(0.602)}$
c	$\alpha = \frac{1}{\cos^{-1}(0.602)}$	**d**	$\alpha = \cos(0.602) - 1$

4 How would you calculate the angle using arc notation?

α has a tan of 0.577

a	$\alpha = \frac{1}{\text{atan}(0.577)}$	**b**	$\alpha = \text{atan}(0.577)$
c	$\alpha = \frac{1}{\tan^{-1}(0.577)}$	**d**	$\alpha = \tan(0.577) - 1$

5 How would you calculate the angle using arc notation?

α has a sin of 0.848

a	$\alpha = \frac{1}{\text{asin}(0.848)}$	**b**	$\alpha = \sin(0.848) - 1$
c	$\alpha = \frac{1}{\sin^{-1}(0.848)}$	**d**	$\alpha = \text{asin}(0.848)$

6 How would you calculate the angle using arc notation?

α has a sin of 0.777

a	$\alpha = \frac{1}{\sin^{-1}(0.777)}$	**b**	$\alpha = \text{asin}(0.777)$
c	$\alpha = \frac{1}{\text{asin}(0.777)}$	**d**	$\alpha = \sin(0.777) - 1$

7 How would you calculate the angle using arc notation?

α has a cos of 0.225

a	$\alpha = \cos(0.225) - 1$	**b**	$\alpha = \frac{1}{\text{acos}(0.225)}$
c	$\alpha = \frac{1}{\cos^{-1}(0.225)}$	**d**	$\alpha = \text{acos}(0.225)$