



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

1 How would you calculate the angle using -1 notation?

α has a tan of 1.28

- | | |
|--|-----------------------------------|
| A $\alpha = \tan(1.28) - 1$ | B $\alpha = \tan^{-1}(1.28)$ |
| C $\alpha = \frac{1}{\tan^{-1}(1.28)}$ | D $\alpha = \frac{1}{\tan(1.28)}$ |

2 How would you calculate the angle using -1 notation?

α has a tan of 5.145

- | | |
|---|------------------------------------|
| A $\alpha = \tan(5.145) - 1$ | B $\alpha = \tan^{-1}(5.145)$ |
| C $\alpha = \frac{1}{\tan^{-1}(5.145)}$ | D $\alpha = \frac{1}{\tan(5.145)}$ |

3 How would you calculate the angle using -1 notation?

α has a tan of 0.966

- | | |
|---|------------------------------------|
| A $\alpha = \tan(0.966) - 1$ | B $\alpha = \frac{1}{\tan(0.966)}$ |
| C $\alpha = \frac{1}{\tan^{-1}(0.966)}$ | D $\alpha = \tan^{-1}(0.966)$ |

4 How would you calculate the angle using -1 notation?

α has a sin of 0.988

- | | |
|---|------------------------------------|
| A $\alpha = \sin^{-1}(0.988)$ | B $\alpha = \sin(0.988) - 1$ |
| C $\alpha = \frac{1}{\sin^{-1}(0.988)}$ | D $\alpha = \frac{1}{\sin(0.988)}$ |

5 How would you calculate the angle using -1 notation?

α has a sin of 0.276

- | | |
|-------------------------------|---|
| A $\alpha = \sin^{-1}(0.276)$ | B $\alpha = \frac{1}{\sin^{-1}(0.276)}$ |
| C $\alpha = \sin(0.276) - 1$ | D $\alpha = \frac{1}{\sin(0.276)}$ |

6 How would you calculate the angle using -1 notation?

α has a tan of 6.314

- | | |
|---|-------------------------------|
| A $\alpha = \frac{1}{\tan^{-1}(6.314)}$ | B $\alpha = \tan(6.314) - 1$ |
| C $\alpha = \frac{1}{\tan(6.314)}$ | D $\alpha = \tan^{-1}(6.314)$ |

7 How would you calculate the angle using -1 notation?

α has a sin of 0.777

- | | |
|------------------------------------|---|
| A $\alpha = \frac{1}{\sin(0.777)}$ | B $\alpha = \frac{1}{\sin^{-1}(0.777)}$ |
| C $\alpha = \sin(0.777) - 1$ | D $\alpha = \sin^{-1}(0.777)$ |

8 How would you calculate the angle using -1 notation?

α has a tan of 0.231

- | | |
|---|-------------------------------|
| A $\alpha = \frac{1}{\tan^{-1}(0.231)}$ | B $\alpha = \tan^{-1}(0.231)$ |
| C $\alpha = \frac{1}{\tan(0.231)}$ | D $\alpha = \tan(0.231) - 1$ |