



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

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**2** Calculate the angle in degrees

**$\alpha$  has a sin of 0.242**

a	b	c	d	e	f
$\alpha = 34^\circ$	$\alpha = 24^\circ$	$\alpha = 9^\circ$	$\alpha = 4^\circ$	$\alpha = 29^\circ$	$\alpha = 14^\circ$

**4** Calculate the angle in degrees

**$\alpha$  has a tan of 2.145**

a	b	c	d	e	f
$\alpha = 50^\circ$	$\alpha = 70^\circ$	$\alpha = 65^\circ$	$\alpha = 60^\circ$	$\alpha = 80^\circ$	$\alpha = 85^\circ$

**6** Calculate the angle in degrees

**$\alpha$  has a cos of 0.629**

a	b	c	d	e	f
$\alpha = 56^\circ$	$\alpha = 36^\circ$	$\alpha = 51^\circ$	$\alpha = 66^\circ$	$\alpha = 46^\circ$	$\alpha = 61^\circ$

**1**

Calculate the angle in degrees

**$\alpha$  has a cos of 0.454**

a	b	c	d	e	f
$\alpha = 63^\circ$	$\alpha = 68^\circ$	$\alpha = 78^\circ$	$\alpha = 83^\circ$	$\alpha = 53^\circ$	$\alpha = 73^\circ$

**3**

Calculate the angle in degrees

**$\alpha$  has a tan of 0.51**

a	b	c	d	e	f
$\alpha = 22^\circ$	$\alpha = 32^\circ$	$\alpha = 47^\circ$	$\alpha = 37^\circ$	$\alpha = 12^\circ$	$\alpha = 27^\circ$

**5**

Calculate the angle in degrees

**$\alpha$  has a tan of 0.601**

a	b	c	d	e	f
$\alpha = 16^\circ$	$\alpha = 51^\circ$	$\alpha = 11^\circ$	$\alpha = 31^\circ$	$\alpha = 21^\circ$	$\alpha = 36^\circ$

**7**

Calculate the angle in degrees

**$\alpha$  has a sin of 0.961**

a	b	c	d	e	f
$\alpha = 89^\circ$	$\alpha = 84^\circ$	$\alpha = 74^\circ$	$\alpha = 64^\circ$	$\alpha = 54^\circ$	$\alpha = 69^\circ$