



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

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- 2** Calculate the angle in degrees, given the trigonometric ratio

$$\cos(\alpha) = 0.602$$

a	b	c	d	e	f
$\alpha = 48^\circ$	$\alpha = 73^\circ$	$\alpha = 53^\circ$	$\alpha = 68^\circ$	$\alpha = 63^\circ$	$\alpha = 43^\circ$

- 4** Calculate the angle in degrees, given the trigonometric ratio

$$\tan(\alpha) = 0.404$$

a	b	c	d	e	f
$\alpha = 32^\circ$	$\alpha = 17^\circ$	$\alpha = 12^\circ$	$\alpha = 7^\circ$	$\alpha = 22^\circ$	$\alpha = 27^\circ$

- 6** Calculate the angle in degrees, given the trigonometric ratio

$$\sin(\alpha) = 0.342$$

a	b	c	d	e	f
$\alpha = 0^\circ$	$\alpha = 25^\circ$	$\alpha = 20^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	$\alpha = 15^\circ$

- 1** Calculate the angle in degrees, given the trigonometric ratio

$$\cos(\alpha) = 0.848$$

a	b	c	d	e	f
$\alpha = 47^\circ$	$\alpha = 22^\circ$	$\alpha = 17^\circ$	$\alpha = 52^\circ$	$\alpha = 37^\circ$	$\alpha = 32^\circ$

- 3** Calculate the angle in degrees, given the trigonometric ratio

$$\sin(\alpha) = 0.998$$

a	$\alpha = 86^\circ$	b	$\alpha = 71^\circ$
c	$\alpha = 106^\circ$	d	$\alpha = 101^\circ$
e	$\alpha = 81^\circ$	f	$\alpha = 96^\circ$

- 5** Calculate the angle in degrees, given the trigonometric ratio

$$\tan(\alpha) = 5.671$$

a	$\alpha = 85^\circ$	b	$\alpha = 100^\circ$
c	$\alpha = 70^\circ$	d	$\alpha = 80^\circ$
e	$\alpha = 90^\circ$	f	$\alpha = 60^\circ$

- 7** Calculate the angle in degrees, given the trigonometric ratio

$$\tan(\alpha) = 0.81$$

a	b	c	d	e	f
$\alpha = 24^\circ$	$\alpha = 59^\circ$	$\alpha = 34^\circ$	$\alpha = 54^\circ$	$\alpha = 39^\circ$	$\alpha = 44^\circ$