



Trigonometry - Calculating Angles from Ratios (Words)



1 Calculate the angle in degrees

α has a sin of 0.485

A	B	C	D	E	F
$\alpha = 14^\circ$	$\alpha = 24^\circ$	$\alpha = 19^\circ$	$\alpha = 29^\circ$	$\alpha = 49^\circ$	$\alpha = 44^\circ$

2 Calculate the angle in degrees

α has a sin of 0.242

A	B	C	D	E	F
$\alpha = 34^\circ$	$\alpha = 9^\circ$	$\alpha = 24^\circ$	$\alpha = 29^\circ$	$\alpha = 4^\circ$	$\alpha = 14^\circ$

3 Calculate the angle in degrees

α has a tan of 1.664

A	B	C	D	E	F
$\alpha = 69^\circ$	$\alpha = 79^\circ$	$\alpha = 74^\circ$	$\alpha = 59^\circ$	$\alpha = 44^\circ$	$\alpha = 64^\circ$

4 Calculate the angle in degrees

α has a sin of 0.999

A	B	C	D	E	F
$\alpha = 98^\circ$	$\alpha = 78^\circ$	$\alpha = 83^\circ$	$\alpha = 73^\circ$	$\alpha = 88^\circ$	$\alpha = 93^\circ$

5 Calculate the angle in degrees

α has a tan of 0.727

A	B	C	D	E	F
$\alpha = 21^\circ$	$\alpha = 51^\circ$	$\alpha = 36^\circ$	$\alpha = 46^\circ$	$\alpha = 16^\circ$	$\alpha = 56^\circ$

6 Calculate the angle in degrees

α has a sin of 0.777

A	B	C	D	E	F
$\alpha = 61^\circ$	$\alpha = 66^\circ$	$\alpha = 36^\circ$	$\alpha = 56^\circ$	$\alpha = 71^\circ$	$\alpha = 51^\circ$

7 Calculate the angle in degrees

α has a cos of 0.087

A	B	C	D	E	F
$\alpha = 95^\circ$	$\alpha = 90^\circ$	$\alpha = 85^\circ$	$\alpha = 70^\circ$	$\alpha = 65^\circ$	$\alpha = 80^\circ$

8 Calculate the angle in degrees

α has a tan of 0.51

A	B	C	D	E	F
$\alpha = 22^\circ$	$\alpha = 37^\circ$	$\alpha = 27^\circ$	$\alpha = 12^\circ$	$\alpha = 32^\circ$	$\alpha = 47^\circ$