

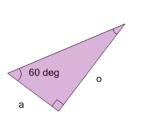
## mobius

## **Trigonometry - Approximating Ratios in Decimal from Diagrams**



1 Visually approximate the ratio of side 'o' to side 'a'

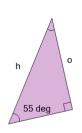
$$\frac{b}{a} = 1.73 \frac{b}{a} = 281.49$$



$$\frac{\delta}{a} = 0.93 \frac{\delta}{a} = 2.54$$

$$rac{ar{b}}{a}=2.31 rac{ar{b}}{o}=280.00$$

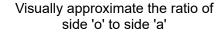
2

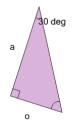


Visually approximate the ratio of side 'o' to side 'h'

$rac{a}{h}=1.08$	$rac{a}{h}=28.58$
$rac{o}{h}=$ 0.81	$rac{o}{h}=$ 0.54
$rac{e}{h}=0.45$	

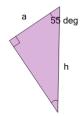
3





$\begin{array}{c} A & \frac{o}{a} = 0.57 \end{array}$	$\frac{B}{a} = 0.79$
$\frac{a}{c} \frac{a}{h} = 11.19$	$\frac{D}{a} = 0.84$
$\frac{E}{a} = 1.00$	$\frac{F}{a} = 0.88$

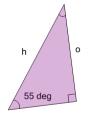
4



Visually approximate the ratio of side 'a' to side 'h'

$rac{a}{h}=0.57$	$rac{a}{h}=$ 0.26
$rac{a}{h}=$ 0.89	$rac{a}{h}=$ 0.80
$\frac{E}{o} = 2.03$	$rac{a}{h}=$ 0.30

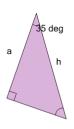
5



Visually approximate the ratio of side 'o' to side 'h'

$\frac{A}{o} = 73.96$	$rac{B}{h} = 1.13$
$rac{c}{h}=1.09$	$^{ extsf{D}} \; rac{o}{h} =  extsf{0.46}$
$\frac{e}{h} = 0.82$	$rac{oldsymbol{o}}{h}=1.04$

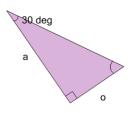
6



Visually approximate the ratio of side 'a' to side 'h'

$rac{a}{h}=1.14$	$\frac{B}{o} = 1.32$
$\frac{c}{h} = 0.55$	$^{ extsf{D}} \; rac{a}{h} =  extsf{0.51}$
$rac{a}{h}=$ 0.82	

7 Visually approximate the ratio of side 'o' to side 'a'

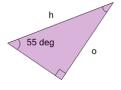


 $rac{\dot{o}}{h} = 0.19 rac{\ddot{a}}{a} = 121.81$ 

8	= 0.90	D 0	= 69.71
a		a	

$$\left|rac{b}{a}
ight|=0.58\left|rac{\hbar}{a}
ight|=1.15$$

8



Visually approximate the ratio of side 'o' to side 'h'

$rac{a}{h}=90.30$	$rac{a}{b}=0.50$
$\frac{c}{a} = 62.08$	$rac{o}{h}=0.55$
$rac{e}{h}=0.82$	$rac{F}{h} = 1.13$