16. Sinuss, kosinuss un tangenss

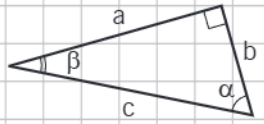
1. Ieraksti trūkstošos vārdus definīcijās!

Par leņķa sinusu sauc ..... attiecību pret ..... .

Par leņķa kosinusu sauc ..... attiecību pret ..... .

Par leņķa tangensu sauc ..... attiecību pret ..... .

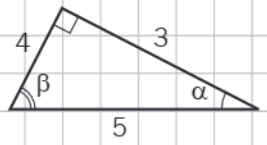
2. Uzraksti atbilstošās trijstūra malu attiecības!



$\sin\alpha = \frac{\quad}{\quad}$ $\sin\beta = \frac{\quad}{\quad}$

$\cos\alpha = \frac{\quad}{\quad}$ $\cos\beta = \frac{\quad}{\quad}$

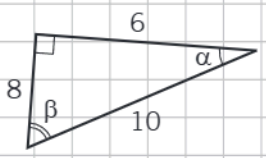
$\operatorname{tg}\alpha = \frac{\quad}{\quad}$ $\operatorname{tg}\beta = \frac{\quad}{\quad}$



$\sin\alpha =$ $\sin\beta =$

$\cos\alpha =$ $\cos\beta =$

$\operatorname{tg}\alpha =$ $\operatorname{tg}\beta =$



$\frac{6}{10} = \sin\ldots\ldots = \cos\ldots\ldots$

$\frac{8}{10} =$

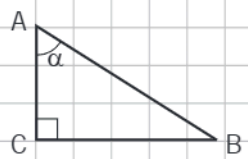
$\frac{6}{8} =$

Iepazīsti grieķu alfabēta burtus!

α [alfa] β [beta] γ [gamma]

3. Nosaki trijstūra malu garumus!

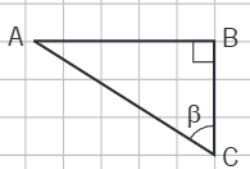
$\sin\alpha = \frac{5}{7}$



$CB =$ .....

$AB =$ .....

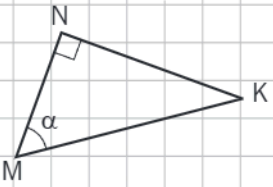
$\cos\beta = \frac{3}{8}$



.....

.....

$\operatorname{tg}\alpha = \frac{7}{5}$



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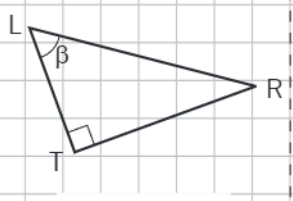
$\operatorname{tg}\beta = 1\frac{2}{3}$



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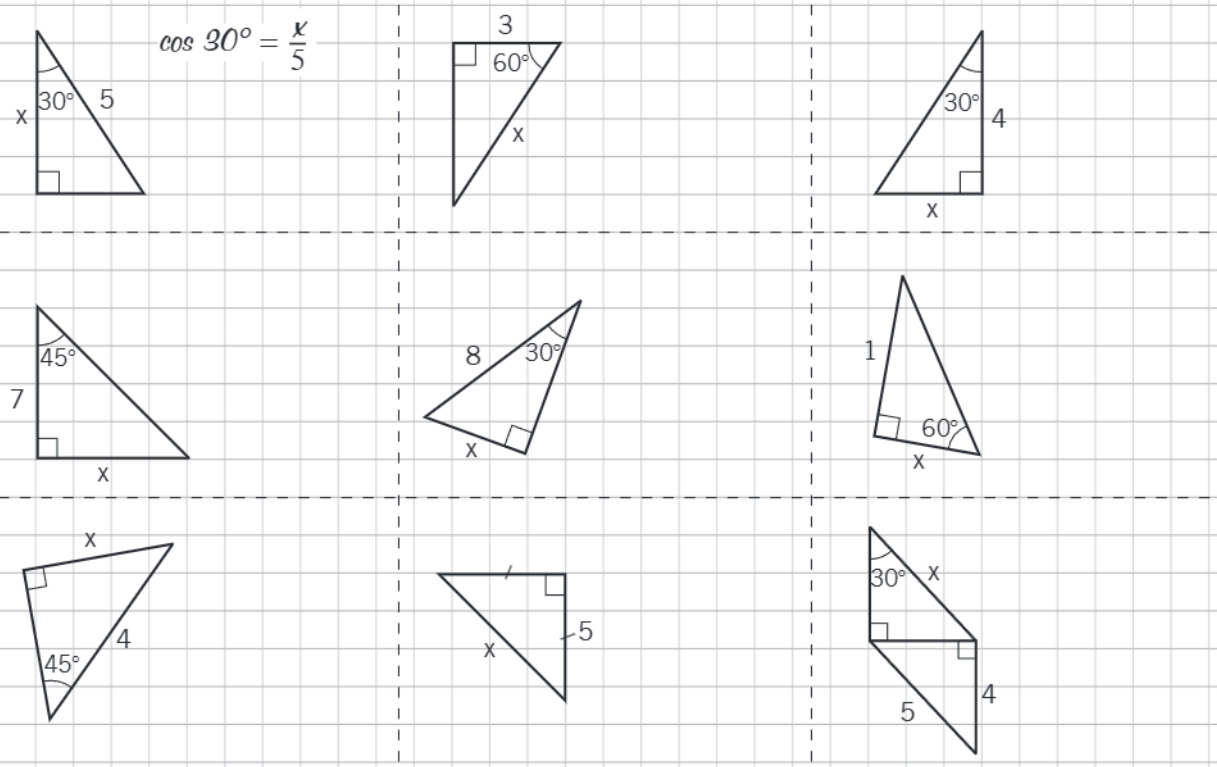
4. Konstruē trijstūri!

$\sin\alpha = 0{,}4$

$\cos\beta = 0{,}25$

$\operatorname{tg}\alpha = 1$

5. Aprēķini trijstūra nezināmo malu, kas apzīmēta ar x!



6. Aizpildi tabulu!

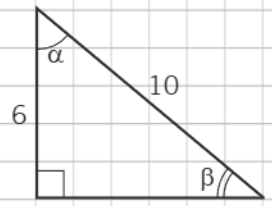
	60°	45°	30°
tg			
sin			
cos			

7. Nosaki leņķa lielumu!

$\sin \underline{\quad 30^\circ \quad} = \frac{1}{2}$ $\sin \underline{\quad\quad} = \frac{\sqrt{3}}{2}$ $\operatorname{tg} \underline{\quad\quad} = \frac{\sqrt{3}}{3}$ $\sin \underline{\quad\quad} = \frac{\sqrt{2}}{2}$ $\cos \underline{\quad\quad} = \frac{\sqrt{2}}{2}$

$\cos \underline{\quad\quad} = \frac{\sqrt{3}}{2}$ $\operatorname{tg} \underline{\quad\quad} = 1$ $\cos \underline{\quad\quad} = \frac{1}{2}$ $\operatorname{tg} \underline{\quad\quad} = \sqrt{3}$ $\sin \underline{\quad\quad} = 1$

8. Aizpildi tabulu!



$\sin \alpha$		$\sin \beta$	
$\cos \alpha$	$\frac{3}{5}$	$\cos \beta$	
$\operatorname{tg} \alpha$		$\operatorname{tg} \beta$	

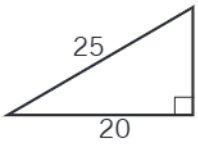
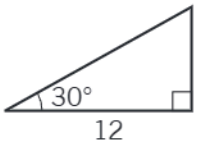
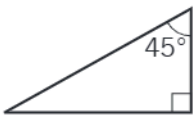
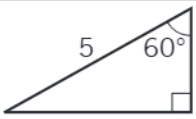
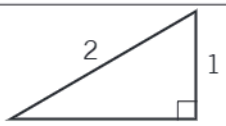
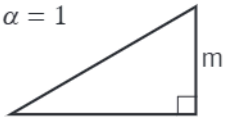
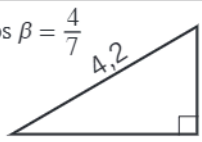
$\sin^2 \alpha =$ .....

$\cos^2 \alpha =$ .....

$\sin^2 \alpha + \cos^2 \alpha =$.....

.....

9. Aizpildi tabulu!

Piemēri		Malas			Leņķi		Trigonometrisko funkciju vērtības		
		a	b	c	α	β	$\sin\alpha$	$\cos\beta$	$\operatorname{tg}\alpha$
1.			*20*	*25*	–	–			
2.									
3.									
4.									
5.									
6.	$\operatorname{tg}\alpha = 1$ 								
7.	$\cos\beta = \frac{4}{7}$ 								

Risinājumi.