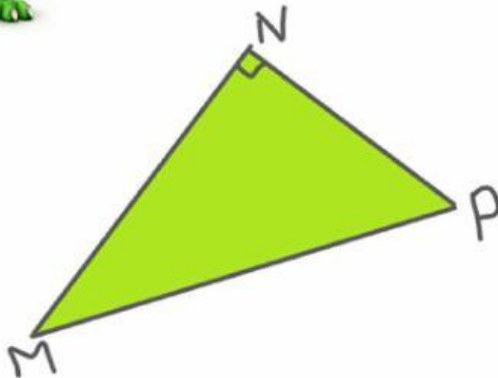




Stačiojo trikampio smailiojo kampo sinusas, kosinusas ir tangentas

1. Pasirinkite, kuri formulė yra teisinga kampo M sinuso reikšmei apskaičiuoti.



$$\sin \angle M = \frac{MN}{MP}$$

$$\sin \angle M = \frac{NP}{MP}$$

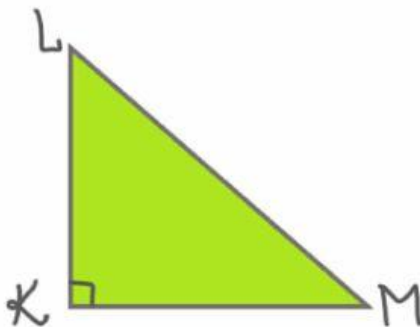
$$\sin \angle M = \frac{MN}{NP}$$

$$\sin \angle M = \frac{MP}{MN}$$

$$\sin \angle M = \frac{MP}{NP}$$

$$\sin \angle M = \frac{NP}{MN}$$

2. Pasirinkite, kuri formulė yra teisinga kampo L kosinuso reikšmei apskaičiuoti.



$$\cos \angle L = \frac{KM}{LK}$$

$$\cos \angle L = \frac{KL}{LM}$$

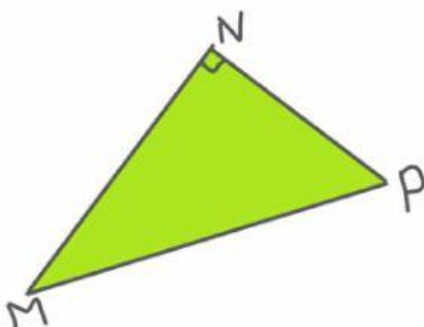
$$\cos \angle L = \frac{LM}{KM}$$

$$\cos \angle L = \frac{KM}{LM}$$

$$\cos \angle L = \frac{LM}{KL}$$

$$\cos \angle M = \frac{KL}{KM}$$

3. Pasirinkite, kuri formulė yra teisinga kampo M tangento reikšmei apskaičiuoti.



$$\operatorname{tg} \angle M = \frac{MN}{MP}$$

$$\operatorname{tg} \angle M = \frac{NP}{MP}$$

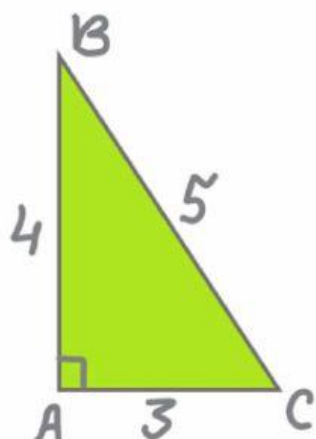
$$\operatorname{tg} \angle M = \frac{MN}{NP}$$

$$\operatorname{tg} \angle M = \frac{MP}{MN}$$

$$\operatorname{tg} \angle M = \frac{MP}{NP}$$

$$\operatorname{tg} \angle M = \frac{NP}{MN}$$

4. Apskaičiuokite stataus trikampio ABC, kampo C sin, cos ir tg reikšmes.



a) $\sin \angle C =$

$\frac{4}{5}$

$\frac{3}{5}$

$\frac{4}{3}$

$\frac{3}{4}$

b) $\cos \angle C =$

$\frac{4}{5}$

$\frac{3}{5}$

$\frac{4}{3}$

$\frac{3}{4}$

c) $\operatorname{tg} \angle C =$

$\frac{4}{5}$

$\frac{3}{5}$

$\frac{4}{3}$

$\frac{3}{4}$

5. Pasirinkite, kuri formulė yra teisinga kampo A sinuso, kosinuso ir tangento reikšmei apskaičiuoti.



a) $\sin \angle A =$

$\frac{AC}{AB}$

$\frac{BC}{AB}$

$\frac{AC}{BC}$

$\frac{BC}{AC}$

b) $\cos \angle A =$

$\frac{AC}{AB}$

$\frac{BC}{AB}$

$\frac{AC}{BC}$

$\frac{BC}{AC}$

c) $\operatorname{tg} \angle A =$

$\frac{AC}{AB}$

$\frac{BC}{AB}$

$\frac{AC}{BC}$

$\frac{BC}{AC}$

6. Kokia yra duoto kampo reikšmė?

a) $\sin 60^\circ =$

$\frac{1}{2}$

$\frac{\sqrt{2}}{2}$

$\frac{\sqrt{3}}{2}$

$\frac{\sqrt{3}}{3}$

$\sqrt{3}$

b) $\cos 45^\circ =$

$\frac{1}{2}$

$\frac{\sqrt{2}}{2}$

$\frac{\sqrt{3}}{2}$

$\frac{\sqrt{3}}{3}$

$\sqrt{3}$

c) $\operatorname{tg} 30^\circ =$

$\frac{1}{2}$

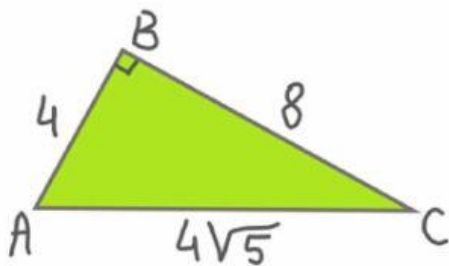
$\frac{\sqrt{2}}{2}$

$\frac{\sqrt{3}}{2}$

$\frac{\sqrt{3}}{3}$

$\sqrt{3}$

7. Apskaičiuokite pavaizduoto stačiojo trikampio kampo A sinuso reikšmę.



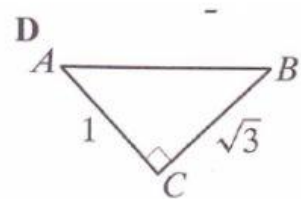
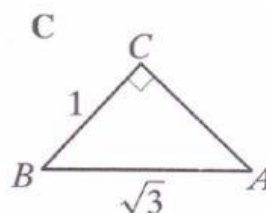
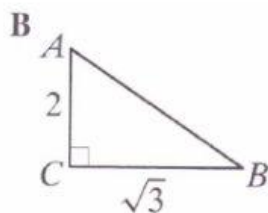
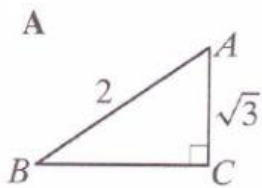
$$\sin \angle A = \frac{\sqrt{5}}{2}$$

$$\sin \angle A = \frac{1}{2}$$

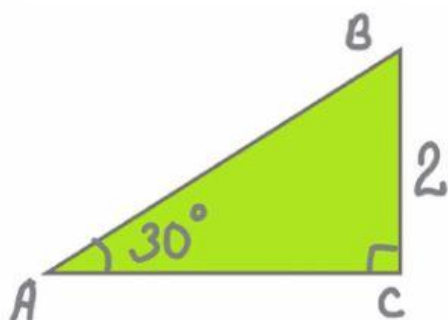
$$\sin \angle A = \frac{\sqrt{5}}{5}$$

$$\sin \angle A = \frac{2\sqrt{5}}{5}$$

8. Pasirink trikampį, kuriame $\cos \angle A = \frac{\sqrt{3}}{2}$?



9. Apskaičiuokite pavaizduoto stačiojo trikampio įžambinės ilgį ir kampo B kosinuso reikšmę.



Įžambinė
AB =

1

4

$2\sqrt{3}$

15

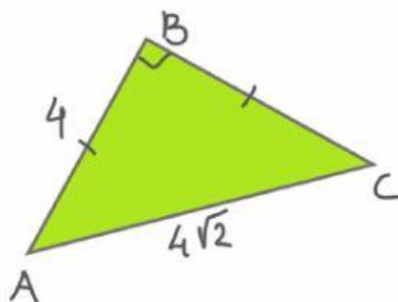
$$\cos \angle B = \frac{\sqrt{3}}{2}$$

$$\cos \angle B = \frac{1}{2}$$

$$\cos \angle B = \frac{1}{\sqrt{3}}$$

$$\cos \angle B = \sqrt{3}$$

10. Apskaičiuokite pavaizduoto stačiojo trikampio kampo C sinuso reikšmę.



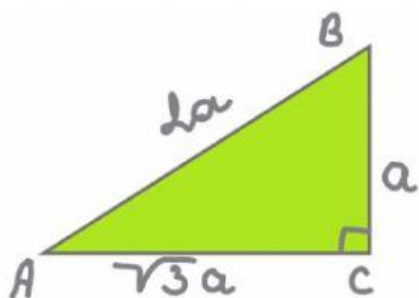
$$\sin \angle C = \sqrt{2}$$

$$\sin \angle C = 1$$

$$\sin \angle C = \frac{\sqrt{2}}{2}$$

$$\sin \angle C = \frac{\sqrt{2}}{4}$$

11. Apskaičiuokite pavaizduoto stačiojo trikampio kampo A tangento reikšmę.



$$\operatorname{tg} \angle A = \frac{\sqrt{3}}{3}$$

$$\operatorname{tg} \angle A = \frac{1}{2}$$

$$\operatorname{tg} \angle A = \sqrt{3}$$

$$\operatorname{tg} \angle A = 2$$

12. Apskaičiuokite:

$$a) \sin 60^\circ + \cos 30^\circ$$

=

$$\sqrt{3}$$

$$\frac{\sqrt{3}}{4}$$

$$\frac{\sqrt{3} + 1}{2}$$

$$1$$

$$b) \operatorname{tg} 45^\circ + 2 \sin 30^\circ$$

=

$$\frac{3}{2}$$

$$\frac{\sqrt{2} + 2}{2}$$

$$2$$

$$1 + \sqrt{3}$$

$$c) (\sin 45^\circ)^2 - 2 \cos 45^\circ$$

=

$$\frac{1}{2} - 2\sqrt{2}$$

$$\frac{1 - 2\sqrt{2}}{2}$$

$$1 - \sqrt{2}$$

$$-\frac{1}{2}$$