

Įrašykite trūkstamas reikšmes
(gali būti skaičiai ir - ženklas)

α	$\sin \alpha$	$\cos \alpha$	$\operatorname{tg} \alpha$	$\operatorname{ctg} \alpha$
0°	0	1		-
30°	$\frac{1}{2}$	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{3}}$	$\sqrt{3}$
45°	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$		1
60°	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	$\sqrt{3}$	$\frac{1}{\sqrt{3}}$
90°				0
120°	$\frac{\sqrt{3}}{2}$	$-\frac{1}{2}$	$-\sqrt{3}$	$-\frac{1}{\sqrt{3}}$
135°	$\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{2}}{2}$		-1
150°	$\frac{1}{2}$	$-\frac{\sqrt{3}}{2}$	$-\frac{1}{\sqrt{3}}$	$-\sqrt{3}$
180°	0	-1		-

Lygties $\operatorname{tg} x = a$ sprendiniai yra
 $x = \operatorname{arctg} a + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$

$$\operatorname{arctg}(-\alpha) = -\operatorname{arctg} \alpha.$$

Sujunkite kiekvieną stačiakampį su debesėliu taip, kad gautumėte teisingą lygybę

$\operatorname{arctg}(-\sqrt{3}) =$

$\operatorname{arctg}(-1) =$

$\operatorname{arctg} 1 =$

$\operatorname{arctg} \frac{\sqrt{3}}{3} =$

$\operatorname{arctg} 0 =$

$\operatorname{arctg}(-\frac{\sqrt{3}}{3}) =$

30°

-30°

45°

-45°

-60°

0°

Su kuriomis x reikšmėmis $\operatorname{tg} x$ neturi prasmės?

90°

-180°

-270°

60°

-90°

30°

-45°

270°

-360°

200°

-120°

-150°

300°

-450°

$$\operatorname{tg} x = \frac{\sqrt{3}}{3},$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

$$\operatorname{tg} x = 1,$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

$$\operatorname{tg} x = 0,$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

$$\operatorname{tg} x = -\frac{\sqrt{3}}{3},$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

$$\operatorname{tg} x = \sqrt{3},$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

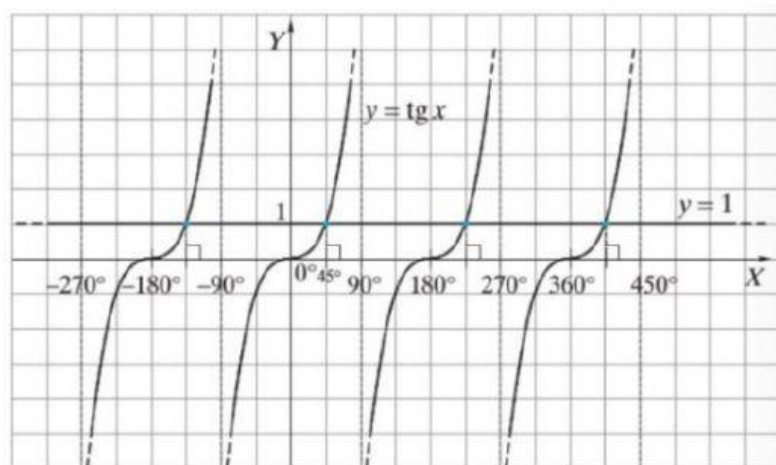
$$\operatorname{tg} x = -1,$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

$$\operatorname{tg} x = -\sqrt{3},$$

$$x = \text{☁}^\circ + 180^\circ \cdot k, \quad k \in \mathbb{Z}.$$

Nubraižyti grafikai $y = \operatorname{tg} x$ ir $y = 1$. Remdamiesi jais, raskite lygties $\operatorname{tg} x = 1$ sprendinius, priklausančius intervalui:



$$(-270^\circ; -90^\circ); x = \text{☁}^\circ;$$

$$(0^\circ; 270^\circ); x = 45^\circ, x = \text{☁}^\circ$$