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Inversās trigonometriskās funkcijas (Skolotāja materiāli)

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1. Inverso trigonometrisko funkciju definīcijas

1) Funkcijas $y = \arcsin x$ definīcijas apgabals ir

- | | | |
|--------------------------|---------------------------------------|---------------------------------------|
| (a) $[-1, 1]$ | (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ | (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$ |
| (d) $(-\infty, +\infty)$ | (e) $(0, \pi)$ | (f) $[0, \pi]$ |

2) Funkcijas $y = \arctg x$ definīcijas apgabals ir

- | | | |
|--------------------------|---------------------------------------|---------------------------------------|
| (a) $[-1, 1]$ | (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ | (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$ |
| (d) $(-\infty, +\infty)$ | (e) $(0, \pi)$ | (f) $[0, \pi]$ |

3) Funkcijas $y = \arccos x$ definīcijas apgabals ir

- | | | |
|--------------------------|---------------------------------------|---------------------------------------|
| (a) $[-1, 1]$ | (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ | (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$ |
| (d) $(-\infty, +\infty)$ | (e) $(0, \pi)$ | (f) $[0, \pi]$ |

4) Funkcijas $y = \text{arcctg } x$ definīcijas apgabals ir

- | | | |
|--------------------------|---------------------------------------|---------------------------------------|
| (a) $[-1, 1]$ | (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ | (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$ |
| (d) $(-\infty, +\infty)$ | (e) $(0, \pi)$ | (f) $[0, \pi]$ |

5) Funkcijas $y = \arcsin x$ vērtību apgabals ir

- (a) $[-1, 1]$ (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$
(d) $(-\infty, +\infty)$ (e) $(0, \pi)$ (f) $[0, \pi]$

6) Funkcijas $y = \arctg x$ vērtību apgabals ir

- (a) $[-1, 1]$ (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$
(d) $(-\infty, +\infty)$ (e) $(0, \pi)$ (f) $[0, \pi]$

7) Funkcijas $y = \arccos x$ vērtību apgabals ir

- (a) $[-1, 1]$ (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$
(d) $(-\infty, +\infty)$ (e) $(0, \pi)$ (f) $[0, \pi]$

8) Funkcijas $y = \text{arcctg } x$ vērtību apgabals ir

- (a) $[-1, 1]$ (b) $(-\frac{\pi}{2}, \frac{\pi}{2})$ (c) $[-\frac{\pi}{2}, \frac{\pi}{2}]$
(d) $(-\infty, +\infty)$ (e) $(0, \pi)$ (f) $[0, \pi]$

2. Inverso trigonometrisko funkciju vērtības (I)

Sākt!

1. $\operatorname{arctg} 0 =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

2. $\operatorname{arcsin} 1 =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

3. $\operatorname{arccos} \left(-\frac{\sqrt{2}}{2} \right) =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

4. $\operatorname{arctg} 1 =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

5. $\operatorname{arccos} 1 =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

$$6. \arcsin\left(-\frac{\sqrt{2}}{2}\right) =$$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

$$7. \operatorname{arctg} 0 =$$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

$$8. \arccos 0 =$$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

$$9. \operatorname{arctg}(-\sqrt{3}) =$$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

$$10. \arcsin\left(-\frac{1}{2}\right) =$$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad -\frac{\pi}{4} \quad \frac{\pi}{4} \quad -\frac{\pi}{6} \quad \frac{\pi}{2} \quad 0$$

Beigt!

3. Inverso trigonometrisko funkciju vērtības (II)

Sākt!

1. $\arcsin 0 =$

$$-\frac{\pi}{3} \quad -\frac{\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

2. $\arctg \frac{\sqrt{3}}{3} =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

3. $\arccos \frac{1}{2} =$

$$-\frac{\pi}{3} \quad -\frac{\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

4. $\text{arcctg}(-1) =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

5. $\text{arcctg} 1 =$

$$-\frac{\pi}{3} \quad -\frac{\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

6. $\arccos \frac{\sqrt{2}}{2} =$

$$-\frac{\pi}{3} \quad -\frac{\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

7. $\arcsin \left(-\frac{\sqrt{3}}{2}\right) =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

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

$$-\frac{\pi}{3} \quad -\frac{\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

9. $\operatorname{arcctg} \frac{\sqrt{3}}{3} =$

$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

10. $\arccos 1 =$

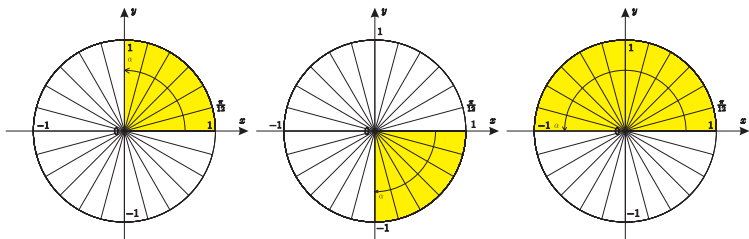
$$-\frac{\pi}{3} \quad \frac{3\pi}{4} \quad 0 \quad \frac{\pi}{6} \quad \frac{\pi}{4} \quad \frac{\pi}{3}$$

Beigt!

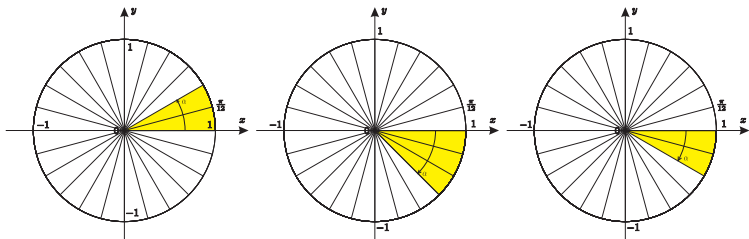
4. Inverso trigonometriskā funkciju vērtības (III)

Sākt!

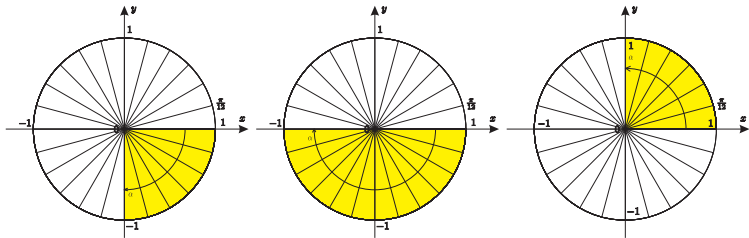
1. $\arccos 0 =$



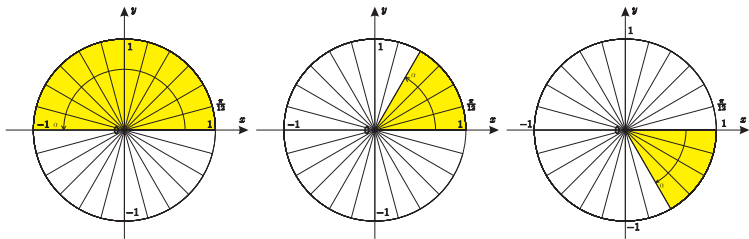
$$2. \arcsin\left(-\frac{1}{2}\right) =$$



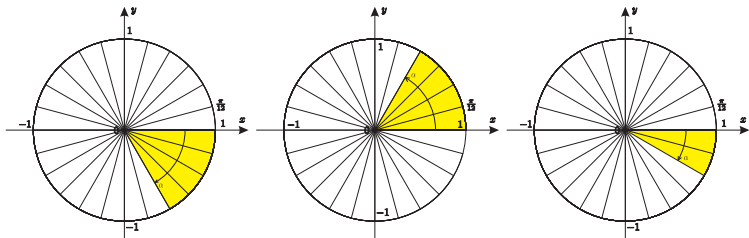
3. $\text{arcctg } 0 =$



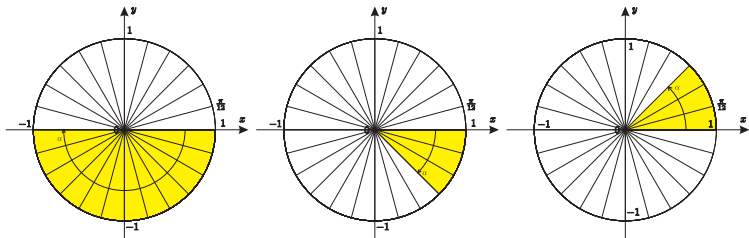
4. $\arccos \frac{1}{2} =$



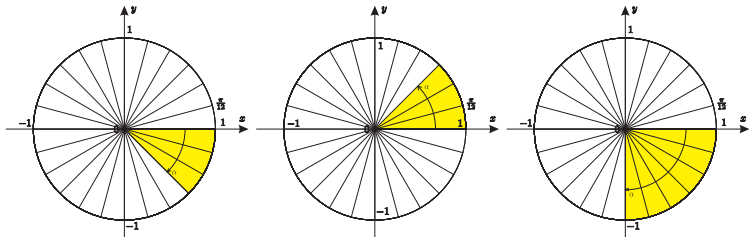
$$5. \arcsin\left(-\frac{\sqrt{3}}{2}\right) =$$



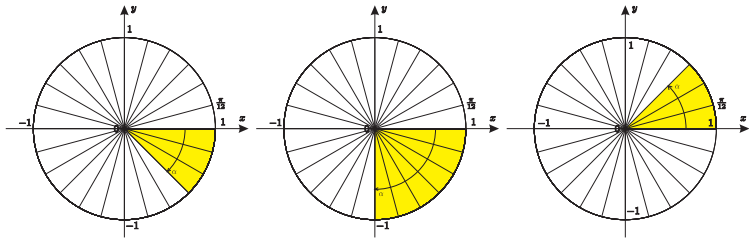
6. $\arctg(-1) =$



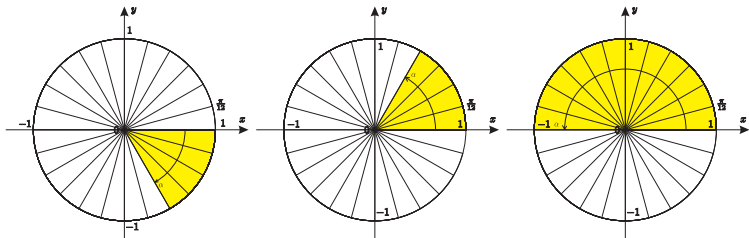
7. $\text{arcctg } 1 =$



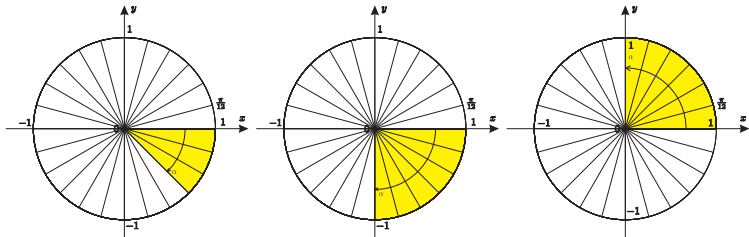
$$8. \arccos \frac{\sqrt{2}}{2} =$$



$$9. \operatorname{arctg}(-\sqrt{3}) =$$



$$10. \arcsin(-1) =$$



Beigt!