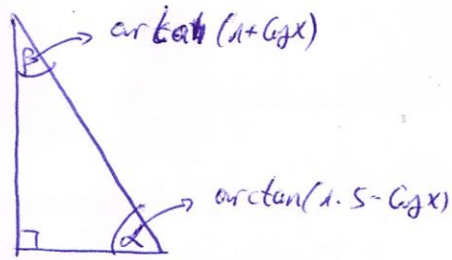


$$\frac{d.79}{25}$$



$$\arctan(1+\cos x) + \arctan(1.5-\cos x) = 90^\circ$$

$$\tan \alpha = \frac{1}{\tan \beta}$$

$$\tan(\arctan(1+\cos x)) = \frac{1}{\tan(\arctan(1.5-\cos x))}$$

$$1+\cos x = \frac{1}{1.5-\cos x}$$

$$1.5 + 0.5\cos x - \cos^2 x = 1$$

$$\cos^2 x - 0.5\cos x - 0.5 = 0$$

$$(\cos x + 1)(\cos x - 0.5) = 0$$

$$\downarrow$$

$$\cos x = -1$$

$$x = \pi + 2\pi k$$

~~2\pi k~~

$$\downarrow$$

$$\cos x = 0.5$$

$$x = \frac{\pi}{3} + 2\pi k$$

$$2\pi k \quad \text{or} \quad \frac{2\pi}{3} + 2\pi k$$

$$k = 0, 1, 2, \dots \quad \frac{2\pi k}{3}$$

für  $x \geq 0$   $x \in \mathbb{R}$

mit  $3/n\pi$