

VZORCE

Cíl: pomocí Editoru rovnic vytvořit libovolný vzorec.

Studijní materiály: \\NAS\Vyuka\PRV1

Zadání:

Vytvořte následující vzorce:

$$\operatorname{tg}\left(\frac{\pi}{4} + y\right) \cdot \operatorname{tg}\left(\frac{\pi}{4} - y\right) = 1$$

$$\sqrt{x+3} - 1 = \sqrt{x - \sqrt{x-2}}$$

$$\left(\frac{x-1}{x+1}\right)^2 - 3\left(\frac{x-1}{x+1}\right) - 4 = 0, x \neq -1$$

$$\sin^2 x + \cos^2 x = 1$$

$$\operatorname{tg} x = \frac{\sin x}{\cos x}$$

$$\cot gx = \frac{\cos x}{\sin x}$$

$$\operatorname{tg} x \cdot \cot gx = 1$$

$$\sin 2x = 2 \sin x \cdot \cos x$$

$$\cos 2x = \cos^2 x - \sin^2 x$$

$$\operatorname{tg} 2x = \frac{2 \operatorname{tg} x}{1 - \operatorname{tg}^2 x}$$

$$\cot g 2x = \frac{\cot g^2 x - 1}{2 \cot gx}$$

$$\alpha = -0,05 K^{-1}, \quad R = \frac{R_0}{2}, \quad \Delta t = ?$$

$$R = R_0(1 + \alpha \Delta t)$$

$$\frac{R_0}{2} = R_0(1 + \alpha \Delta t) / : R_0$$

$$\frac{1}{2} = (1 + \alpha \Delta t) / : 2$$

$$1 = 2(1 + \alpha \Delta t)$$

$$1 = 2 + 2\alpha \Delta t$$

$$\Delta t = -\frac{1}{2\alpha}$$

$$\Delta t = -\frac{1}{2(-0,05 K^{-1})} = +10 K = 10^0 C$$

$$\Delta t = 10^0 C$$

$$A = \begin{pmatrix} 3 & 5 \\ 8 & 1 \end{pmatrix} \quad B = \begin{pmatrix} 7 & -4 \\ 2 & 3 \end{pmatrix} \quad M = \begin{pmatrix} 1 & 1 & 1 \\ 2 & 5 & 3 \\ 4 & 0 & 7 \end{pmatrix} \quad N = \begin{pmatrix} 3 & 2 & 1 \\ 5 & -3 & 0 \\ 7 & 1 & 1 \end{pmatrix}$$

$$\frac{r+s}{r-s} - \frac{r-s}{r+s} = \frac{r^2+s^2}{r^2-s^2}$$