

Pri Upravle vyjazy

$$a) \left( \frac{3^4}{(-2)^{-2}} : \frac{-9^2}{4^{-2}} \right)^2 \quad \left[ = \left( \frac{3^4(-2)^2}{-9^2 \cdot 2^2} \right)^2 = (-1)^2 = \underline{\underline{1}} \right]$$

$$b) \left( \frac{\sqrt{a} + \sqrt{x}}{\sqrt{a+x}} - \frac{\sqrt{a+x}}{\sqrt{a} + \sqrt{x}} \right)^{-2} - \left( \frac{\sqrt{a} - \sqrt{x}}{\sqrt{a+x}} - \frac{\sqrt{a+x}}{\sqrt{a} - \sqrt{x}} \right)^{-2}$$

$$c) \frac{x^2 + 8x + 15}{x^2 - 4x - 21} \quad \left[ = \frac{x+5}{x-7} : \frac{x+3}{x+7} \right] \left[ = \frac{(a+x)(\sqrt{a}+\sqrt{x})^2}{4ax} - \frac{(a+x)(\sqrt{a}-\sqrt{x})^2}{4ax} = \frac{a+x}{\sqrt{ax}} : \frac{a>0}{x>0} \right]$$

$$d) \frac{(x+2)^2 - (x-2)^2}{(x+2)(x-2)} : \frac{8}{4-x^2} \quad \left[ = \frac{8x}{-(4-x^2)} \cdot \frac{4-x^2}{8} = \underline{\underline{-x}}, \quad x \neq \pm 2 \right]$$

$$e) \frac{\sin 2x}{\sin x} \quad \left[ = \underline{\underline{2 \cos x}} ; x \neq k\pi, k \in \mathbb{Z} \right]$$

mini algebraicky

