

5) Zjednodušte: $\frac{\sqrt{a \cdot \sqrt[3]{a^5} \cdot \sqrt[4]{a^3}}}{\sqrt[3]{a^{-2}} \cdot \sqrt{a^3}}$

$$\frac{\sqrt{a \cdot \sqrt[3]{a^5} \cdot \sqrt[4]{a^3}}}{\sqrt[3]{a^{-2}} \cdot \sqrt{a^3}} = \frac{a^{\frac{1}{2}} \cdot a^{\frac{5}{6}} \cdot a^{\frac{3}{4}}}{a^{\frac{2}{3}} \cdot a^{\frac{3}{2}}} = \frac{a^{\frac{12+20+9}{24}}}{a^{\frac{-4+9}{6}}} = a^{\frac{35-20}{24}} = a^{\frac{15}{24}} = \sqrt[24]{a^{15}} = \sqrt[8]{a^5}$$

$a > 0$

[Zpět:](#)

[Další:](#)