

Poenostavite izraz  $(\sqrt[4]{x^{-3}y^5})^2 \cdot \frac{\sqrt[3]{x\sqrt{x^{-1}y^7}}}{\sqrt[3]{x^2y^2}}$  in napišite najmanjši naravni

števíli  $x$  in  $y$ , za kateri je vrednost izraza enaka 8.

$$\left(\sqrt[4]{x^{-3}y^5}\right)^2 \cdot \frac{\sqrt[3]{x\sqrt{x^{-1}y^7}}}{\sqrt[3]{x^2y^2}} = \cancel{8}$$

Najprej urediš kot pri 3b, nato izenačiš z 8.

$$\left(\sqrt[4]{x^{-3 \cdot 2}y^{5 \cdot 2}}\right) \cdot \frac{\sqrt[3]{x\sqrt{x^{-1}y^7}}}{\sqrt[3]{x^2y^2}} = \cancel{8}$$

$$\frac{\left(\sqrt[4]{x^{-6}y^{10}} \cdot \sqrt[3]{x^2y^2}\right) \cdot \sqrt[3]{x\sqrt{x^{-1}y^7}}}{\sqrt[3]{x^2y^2}} = 8$$

$$\frac{\left(\sqrt[4]{x^{-12}y^{20}} \cdot \sqrt[3]{x^4y^4}\right) \cdot \left(\sqrt[3]{xy^7}\right)}{\sqrt[3]{x^2y^2}} = 8$$

$$\frac{\left(\sqrt[4]{x^{-8}y^{24}}\right) \cdot \left(\sqrt[3]{x^2y^9}\right)}{\sqrt[3]{x^2y^2}} = 8$$

$$\frac{\left(\sqrt[4]{x^{-4}y^{31}}\right)}{\sqrt[3]{x^2y^2}} = 8$$