

$$\frac{\sqrt{a}.\sqrt[3]{a}}{\sqrt{a}.\sqrt[3]{a}} = \sqrt[6]{a}$$

$$\frac{\left(\sqrt[3]{y^2} \cdot y^{\frac{1}{3}}\right)^{-6}}{y^{-\frac{5}{3}} \cdot \sqrt[3]{y^2}} = \frac{1}{y^5}$$

$$\sqrt{y \cdot \sqrt[3]{y^4}} = y \cdot \sqrt[6]{y}$$

$$\frac{\sqrt{b} \cdot b^{\frac{1}{3}}}{b^2} = \frac{1}{b \cdot \sqrt[6]{b}} = \frac{\sqrt[6]{b^5}}{b^2}$$

$$\frac{a^{-3} \cdot a^{\frac{9}{5}}}{\sqrt{a} \cdot a^{-\frac{3}{5}}} = \frac{1}{a^2 \cdot \sqrt{a}} = \frac{\sqrt{a}}{a^3}$$

$$\frac{(\sqrt[3]{c} \cdot c^{\frac{2}{5}})^2}{(\sqrt[3]{c^2})^{-\frac{3}{8}}} = c \cdot \sqrt[60]{c^{43}}$$

$$\sqrt[7]{a} \cdot \sqrt{a^3} = \sqrt[14]{a^5}$$

$$\frac{\sqrt{c} \cdot c^{-\frac{1}{3}}}{c^2} = \frac{1}{c \cdot \sqrt[6]{c^5}} = \frac{\sqrt[6]{c}}{c^2}$$

$$\left(\frac{c^{\frac{1}{2}} \cdot c^{\frac{5}{4}}}{\sqrt{c} \cdot \sqrt[3]{c^5}} \right)^{-\frac{2}{3}} = \sqrt[18]{c^7}$$

61. Zjednodušte (předpokládejte kladné hodnoty proměnných):

$$\text{a) } \left(\frac{\sqrt{x} \cdot x^{-\frac{2}{5}} \cdot x}{\sqrt[5]{x^{-1}} \cdot x^0} \right)^{10}$$

$$\text{b) } \left(\frac{m^{\frac{1}{4}} \cdot \sqrt[3]{m^{-2}}}{\sqrt{m} \cdot \sqrt[6]{m^{-5}}} \right)^{-2}$$

$$\text{c) } \frac{\sqrt[3]{r} \cdot \sqrt[8]{s^5}}{(s^{-1})^4 \cdot r^{-\frac{1}{2}}} \cdot \sqrt{\frac{r}{s}}$$

$$\text{d) } \left(\frac{c^{-\frac{1}{3}} \cdot \sqrt[7]{c^{-5}} \cdot c^0}{c \left(\sqrt[3]{c^2} \right)^{-2}} \right)^{-\frac{14}{5}}$$

62. Zjednodušte (předpokládejte kladné hodnoty proměnných):

$$\text{a) } \left(\sqrt[4]{a^3} \sqrt[3]{a} : \sqrt[6]{a^2} \sqrt[3]{a} \right) \cdot \sqrt[18]{a^{-1}}$$

$$\text{b) } \sqrt[7]{\left(\frac{b^3 \sqrt[5]{b^3}}{b^{\frac{3}{2}} \cdot b^0} \right)^{-10}}$$

$$\text{c) } \sqrt[4]{\frac{ab^{-1}}{\sqrt{a^3}}} \cdot \sqrt{\frac{\sqrt[4]{a}}{b^2 \sqrt{b^{-5}}}}$$

$$\text{d) } \frac{\sqrt{2\sqrt{2}}}{\sqrt{3\sqrt{3}}} \cdot \frac{\sqrt[5]{c^{-4}} \cdot \sqrt{c}}{\sqrt[10]{c^{-7}}} \cdot \left(\frac{2}{3} \right)^{-\frac{3}{4}}$$

Upravte dané výrazy

$$\frac{(x^{\frac{1}{2}} y^{\frac{2}{3}})^{-3}}{(x^3 y^{-1})^{-\frac{1}{2}}}$$

$$\frac{(x^{\frac{1}{2}} y^{\frac{2}{3}})^{-3}}{(x^3 y^{-1})^{-\frac{1}{2}}}$$

$$\sqrt[6]{\left(\frac{x\sqrt{x}}{x^{\frac{2}{3}} \cdot x^{\frac{1}{2}}}\right)^{-1}}$$

$$\frac{(x^{\frac{1}{3}} \sqrt[3]{x^2})^{-6}}{\sqrt[3]{x^2} x^{-\frac{5}{3}}},$$

$$\frac{(a^{\frac{1}{3}} b^{-\frac{2}{3}})^{-2}}{(\sqrt{b} a^{\frac{2}{3}})^6}$$