VÝRAZY S ODMOCNINAMI

① $\sqrt[3]{4^5} \cdot \sqrt[3]{4^{-2}} \cdot \sqrt{4^{-3}}$

② $\sqrt{x \sqrt[3]{x}} \cdot \sqrt[3]{x \sqrt{x}}$

③ $\sqrt[4]{a^3} \cdot \sqrt[3]{a^2} \cdot \sqrt{a}$

④ $\sqrt[3]{y^2 \cdot \sqrt{x^3}} : \sqrt{x \cdot \sqrt[3]{y^{-1}}}$

⑤ $\dfrac{\sqrt[3]{2^5}}{\sqrt[3]{\sqrt{2}} \cdot \sqrt{2}}$

⑥ $\dfrac{\sqrt[4]{\sqrt[3]{7}} \cdot \sqrt{7}}{\sqrt[4]{7}}$

⑦ $\dfrac{\sqrt{3} \cdot \sqrt[6]{3^4}}{\sqrt[3]{\sqrt[4]{3}}}$

⑧ $\dfrac{\sqrt[3]{7^5}}{\sqrt[3]{\sqrt{7}} \cdot \sqrt{7}}$

⑨ $\dfrac{\sqrt[3]{25} \cdot \sqrt{5^3}}{\sqrt{\sqrt[3]{5}} \cdot \sqrt{5}}$

⑩ $\sqrt[4]{\left(\dfrac{\sqrt[3]{b} \cdot b^{-1}}{\sqrt{b}}\right)^{-3}}$

⑪ $\sqrt[5]{\left(\dfrac{\sqrt{m} \cdot m^{-2}}{m^{\frac{1}{3}}}\right)^{-2}}$

⑫ $\sqrt[5]{\left(\dfrac{\sqrt{a} \cdot a^{-1}}{\sqrt[3]{a}}\right)^{-3}}$

⑬ $\sqrt[3]{\left(\dfrac{\sqrt[4]{y} \cdot y^{-2}}{\sqrt{y}}\right)^{-4}}$

⑭ $\dfrac{\sqrt[3]{a^{-2}} \sqrt{a^3}}{\sqrt[3]{\sqrt{a^4}} \sqrt{a^{-3}}}$

⑮ $\dfrac{\sqrt{a} \cdot \sqrt[3]{a^2} \cdot \sqrt[4]{a^3}}{\sqrt[12]{a^5}}$

⑯ $\sqrt[3]{\dfrac{a}{\sqrt{b^3}}} \cdot \sqrt{\dfrac{b}{\sqrt[3]{a}}}$

⑰ $\dfrac{\sqrt[6]{a^5} \cdot \sqrt{b} \cdot \sqrt[3]{b^{-1}}}{\sqrt[6]{ab}}$

⑱ $\dfrac{\sqrt[4]{5^3}}{\sqrt{5} \cdot \sqrt[3]{\sqrt{5}}}$

MOCNINY S RACIONÁLNYM EXPONENTOM

① $\dfrac{\left(15^{\frac{1}{3}} \cdot 27^{-\frac{1}{2}}\right)^{-3}}{\left(25^{\frac{1}{4}} \cdot 9^{\frac{1}{8}}\right)^{-2}} : \dfrac{\sqrt{\sqrt[3]{9}}}{\sqrt[3]{3 \sqrt[4]{27}}}$

② $\dfrac{\left(10^{\frac{1}{3}} \cdot 8^{-\frac{1}{2}}\right)^{-3}}{\left(5^{\frac{1}{4}} \cdot 4^{\frac{1}{8}}\right)^{2}} : \dfrac{\sqrt{2 \sqrt[3]{4}}}{\sqrt[3]{2 \sqrt[4]{4}}}$

③ $\dfrac{\left(10^{\frac{1}{3}} \cdot 8^{-\frac{1}{2}}\right)^{-3}}{\left(25^{\frac{1}{4}} \cdot 4^{\frac{1}{8}}\right)^{-2}} : \dfrac{\sqrt{2 \sqrt[3]{4}}}{\sqrt[3]{2 \sqrt[4]{8}}}$

④ $\dfrac{\left(15^{\frac{1}{2}} \cdot 27^{-\frac{1}{2}}\right)^{-2}}{\left(25^{\frac{1}{4}} \cdot 9^{\frac{1}{8}}\right)^{-2}} : \dfrac{\sqrt{\sqrt[3]{9}}}{\sqrt[3]{3 \sqrt[4]{27}}}$

⑤ $\left[\left(3^{\frac{13}{12}}\right)^{\frac{1}{8}} \cdot \left(3^{\frac{1}{9}}\right)^{\frac{7}{4}}\right] : \left(3^{\frac{1}{6}}\right)^{\frac{8}{3}}$

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

IRACIONÁLNE ROVNICE

$3\sqrt{2x+9} = 21$

$\sqrt{2x-1} = \sqrt{x-5}$

$\sqrt{x^2 + 4x - 17} = 2$

$\sqrt{x^2 + 2x - 11} = 2$

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

$\sqrt{\dfrac{x}{x+3}} + 2 = 2$

$\sqrt{\dfrac{x-6}{4-x}} = 1$

$\sqrt{\dfrac{x-7}{3-x}} + 1 = 2$

$\sqrt{5 - \dfrac{4}{x+2}} = 2$

$\sqrt{2x - x^2} = x - 2$

$3 - 2x = \sqrt{2x^2 - x + 4}$

$x - 5 = \sqrt{x^2 + 9}$

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

$x - 3 = \sqrt{x^2 - 4x - 1}$

$2x - \sqrt{4x^2 - 8x} = 4$

$x - \sqrt{x^2 - 4x + 1} = 3$

$x - \sqrt{x} = 12$

$7\sqrt{x} = x - 18$

$x + 8 = 6\sqrt{x}$

$4\sqrt{x} + 5 = x$

$\sqrt{7 - \sqrt{x-3}} = 2$

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

$\sqrt{x - \sqrt{11x + 4}} = 4$

$\sqrt{x^2 + \sqrt{4x + 5}} = x + 1$