

1. Vypočítajte

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|-----------------------------|------------------------------|--------------------------------------|---|
| a) $\sqrt{14400} =$ | b) $\sqrt{90000} =$ | c) $\sqrt{0,0036} =$ | d) $\sqrt{0,0121} =$ |
| e) $\sqrt{1,69} =$ | f) $\sqrt{0,0004} =$ | g) $\sqrt{12} \cdot \sqrt{3} =$ | h) $\sqrt{10} \cdot \sqrt{12} \cdot \sqrt{30} =$ |
| i) $\sqrt{\frac{25}{16}} =$ | j) $\sqrt{\frac{81}{100}} =$ | k) $\frac{\sqrt{3200}}{\sqrt{50}} =$ | l) $\frac{\sqrt{120} \cdot \sqrt{6}}{\sqrt{125}} =$ |
| m) $\sqrt[3]{27000} =$ | n) $\sqrt[4]{0,0016} =$ | o) $\sqrt[4]{810000} =$ | p) $\sqrt[3]{50} \cdot \sqrt[3]{20} =$ |

2. Čiastočne odmocníte

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|---------------------|-------------------------|----------------------|--------------------------|
| a) $\sqrt{12} =$ | b) $\sqrt{288} =$ | c) $\sqrt{1000} =$ | d) $\sqrt{50} =$ |
| e) $\sqrt{72} =$ | f) $\sqrt{200} =$ | g) $\sqrt[3]{81} =$ | h) $\sqrt[3]{32} =$ |
| i) $\sqrt{27x^7} =$ | j) $\sqrt{x^5 y^3 z} =$ | k) $\sqrt[3]{a^7} =$ | l) $\sqrt[3]{m^4 n^5} =$ |

3. Usmerníte zlomky

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|------------------------------------|---|------------------------------|------------------------------------|
| a) $\frac{1}{\sqrt{2}} =$ | b) $\frac{3}{\sqrt{3}} =$ | c) $\frac{2}{\sqrt{2}-1} =$ | d) $\frac{\sqrt{3}}{2-\sqrt{3}} =$ |
| e) $\frac{3}{\sqrt{2}+\sqrt{5}} =$ | f) $\frac{3+\sqrt{3}}{\sqrt{7}+\sqrt{3}} =$ | g) $\frac{1}{\sqrt[3]{2}} =$ | h) $\frac{6}{\sqrt[3]{4}} =$ |

4. Upravte $\sqrt[3]{\sqrt{x}} ; \sqrt[6]{\sqrt{a^3}} ; \sqrt[3]{\sqrt[3]{3}} ; \sqrt{\sqrt[3]{x^4}} ; \sqrt[5]{\sqrt[3]{a^{10}}} ; \sqrt[4]{\sqrt{m^8}}$

5. Vypočítajte

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| a) $(\sqrt{3} - \sqrt{2})^2 + 2\sqrt{6} =$ | b) $\sqrt{5} + 3\sqrt{3} - (2\sqrt{5} - 3\sqrt{5} - \sqrt{3}) =$ |
| c) $(2\sqrt{3} + \sqrt{5})^2 - 16 =$ | d) $(\sqrt{6} - \sqrt{2})(\sqrt{3} + \sqrt{2}) + 3\sqrt{2} - \sqrt{3} =$ |
| e) $(3\sqrt{2} - 2\sqrt{3})(\sqrt{3} + \sqrt{2}) =$ | f) $(1 + \sqrt{2})(\sqrt{5} - 3\sqrt{10}) + 2\sqrt{2} \cdot \sqrt{5} =$ |
| g) $\frac{1 + \sqrt{3}}{2 + \sqrt{3}} =$ | h) $\frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}} + \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}} =$ |
| i) $\frac{\sqrt{6}}{2\sqrt{2} - \sqrt{5}} - \frac{\sqrt{10} + 3}{\sqrt{3}} =$ | j) $\frac{-2\sqrt{5}}{\sqrt{5} - 1} + \frac{2\sqrt{5} + 4}{\sqrt{5}} =$ |