

Procvičování vlastností odmocnin

$$1. \left(\sqrt[4]{m} \cdot m^{-\frac{2}{3}} : \sqrt[4]{m^3} \right)^3 =$$

$$2. \sqrt{72a^3b} - 2\sqrt{8ab^3} + \sqrt{18ab} =$$

$$3. \sqrt[3]{y^5 \sqrt{y^3}} : \left(y^{\frac{7}{6}} \cdot \sqrt[6]{y} \right) =$$

$$4. \frac{3\sqrt{6x}}{2\sqrt{3} - \sqrt{x}} =$$

$$5. \left(x^{\frac{2}{3}} \cdot \sqrt[5]{x^4} \right)^{\frac{3}{2}} \cdot x^{-\frac{11}{10}} =$$

$$6. \sqrt[4]{x^5 y^3} \cdot \sqrt[3]{x^2 y} : (x^{-2} y^{-3})^{\frac{1}{6}} =$$

$$7. \sqrt{48x^2} + 3\sqrt{3x} - 2\sqrt{75x} =$$

$$8. \sqrt[6]{\frac{4a^5 b^7}{\sqrt[3]{2ab}}} =$$

$$9. \sqrt[3]{54a^2 b^4} : \sqrt[3]{6ab} =$$

$$10. \sqrt{18x^3 y} \cdot (2x^2 y)^{-\frac{1}{2}} =$$

$$11. \sqrt{6} (\sqrt{150x} - 3\sqrt{6x} + \sqrt{24x}) =$$

Výsledky

1. $m^{-\frac{7}{2}}$

2. $(6a - 4b + 3)\sqrt{2ab}$

3. $y^{\frac{5}{6}}$

4. $\frac{3\sqrt{6x}(2\sqrt{3} + \sqrt{x})}{12 - x}$

5. $x^{\frac{11}{10}}$

6. $x^{\frac{9}{4}} y^{\frac{19}{12}}$

7. $4x\sqrt{3} - 7\sqrt{3x}$

8. $2^{\frac{5}{18}} a^{\frac{7}{9}} b^{\frac{10}{9}}$

9. $a^{\frac{1}{3}} b\sqrt[3]{9}$

10. $3\sqrt{x}$

11. $24\sqrt{x}$