Obavezan domaći zadatak – korenovanje

Zadaci za ocene 2 i 3

ZADATAK 1. Izračunaj:

a) $\sqrt[3]{125}-3\cdot\sqrt[4]{16}-4\cdot\sqrt[5]{32}$,

b) $\sqrt{\frac{16}{25}}-\sqrt[3]{-125}-\sqrt{49}+\sqrt[5]{-\frac{1}{243}}$,

c) $\sqrt[3]{0{,}001\cdot 125}+\sqrt[4]{\frac{1}{256}\cdot 10000}$.

ZADATAK 2. Izračunati:

a) $2\cdot\sqrt{50}-\sqrt{32}+\sqrt{72}-2\cdot\sqrt{8}$,

b) $\sqrt{\frac{3}{4}+\frac{\sqrt{12}}{3}}+2\cdot\sqrt{\frac{3}{25}-\frac{\sqrt{75}}{5}}$,

c) $\sqrt[3]{108}-5\cdot\sqrt[3]{384}+2\cdot\sqrt[3]{500}-3\cdot\sqrt[3]{256}+8\cdot\sqrt[3]{6}$.

ZADATAK 3. Racionališi imenioce:

a) $\frac{14}{\sqrt{7}}$,

b) $\frac{12}{\sqrt[3]{3}}$,

c) $\frac{1}{2+\sqrt{5}}$,

d) $\frac{\sqrt{2}+\sqrt{3}}{\sqrt{2}-\sqrt{3}}$.

ZADATAK 4. Izračunaj:

a) $4^{\frac{1}{2}}+8^{\frac{1}{3}}+16^{\frac{1}{4}}+32^{\frac{1}{5}}$,

b) $25^{-\frac{1}{2}}-\left(\frac{1}{27}\right)^{-\frac{2}{3}}+1000^{\frac{1}{3}}$

c) $\left(16^{\frac{1}{8}}+\left(27^{-\frac{2}{3}}\right)^{-\frac{1}{2}}\right)\cdot\left(2^{0,5}-\left(\frac{1}{9}\right)^{-\frac{1}{2}}\right)$

ZADATAK 5. Izvršiti naznačene operacije:

a) $\sqrt[6]{2,5x^4y}\cdot\sqrt[6]{4xy^8}\cdot\sqrt[6]{0,5x^4y^5}$

b) $\sqrt[8]{\frac{a^{18}b^4c^{16}}{x^7y^7}}:\sqrt[8]{\frac{a^{10}c^2x}{b^8y^7}}$

c) $\sqrt[4]{\sqrt[6]{a^5}}\cdot\sqrt[12]{\sqrt{a^3}}\cdot\sqrt[3]{\sqrt[8]{a^9}}\cdot\sqrt{\sqrt[12]{a}}$

d) $\left(\sqrt[3]{x^2\sqrt{x}}\cdot\left(\sqrt[3]{x^2}\right)^4\right):\sqrt{x^{-7}}$