III.

Zjednodušte výrazy: Zpět:

Výraz	Řešení	Výsledek
a) $\frac{c^{-2}\cdot c}{\frac{1}{c^3}}$	$\frac{c^{-2}\cdot c}{\frac{1}{c^3}} = c^{-2}\cdot c\cdot c^3 = c^2$	$c^2,$ $c\neq 0$
b) $\frac{c^{\frac{-1}{2}}\sqrt{c^3}}{\sqrt[3]{c^{-2}}}$	$\frac{c^{\frac{-1}{2}}\sqrt{c^3}}{\sqrt[3]{c^{-2}}} = \frac{c^{\frac{-1}{2}}\cdot c^{\frac{3}{2}}}{c^{-\frac{2}{3}}} = c^{\frac{-3+9+4}{6}} = c^{\frac{5}{3}}$	$c^{\frac{5}{3}},$ $c>0$
c) $\sqrt[4]{c\sqrt[4]{\sqrt{c^{-5}}}}\cdot c^{\frac{1}{2}}$	$\sqrt[4]{c\sqrt[4]{\sqrt{c^{-5}}}}\cdot c^{\frac{1}{2}} = c^{\frac{1}{4}}\cdot c^{-\frac{5}{32}}\cdot c^{\frac{1}{2}} = c^{\frac{8-5+16}{32}} = c^{\frac{19}{32}}$	$c^{\frac{19}{32}},$ $c>0$
d) $\sqrt[4]{25}\cdot\sqrt{5}\cdot\sqrt[3]{625}$	$\sqrt[4]{25}\cdot\sqrt{5}\cdot\sqrt[3]{625} = 5^{\frac{1}{2}}\cdot 5^{\frac{1}{2}}\cdot 5^{\frac{4}{3}} = 5^{\frac{7}{3}}$	$5^{\frac{7}{3}}$
e) $\sqrt{98}-\sqrt{18}-\sqrt{32}$	$\sqrt{98}-\sqrt{18}-\sqrt{32} = \sqrt{49\cdot 2}-\sqrt{9\cdot 2}-\sqrt{16\cdot 2} = 7\sqrt{2}-3\sqrt{2}-4\sqrt{2} = 0$	0
f) $\frac{10^4\cdot 0{,}001}{1000000}$	$\frac{10^4\cdot 0{,}001}{1000000} = \frac{10^4\cdot 10^{-3}}{10^6} = 10^{-5}$	10^{-5}