

Ponovimo izraze s koreni in potencami.

a) $\sqrt{144} + 3 \cdot \sqrt{361} =$

f) $5 \cdot 2^3 - 10^2 : (-25) =$

b) $(\sqrt{49} + \sqrt{225}) \cdot 11 =$

g) $-2\sqrt{81} + 2^3 \cdot 3^3 =$

c) $3\sqrt{9} - \sqrt{16 \cdot 25} =$

h) $8^2 - 5\sqrt{81} + (-2)^3 =$

č) $6^2 + 9\sqrt{4} - 3^3 =$

i) $1000 \cdot 0,02^2 - \sqrt{0,16} =$

d) $2 \cdot 4^3 + \sqrt{3 \cdot 5^2 + 46} - 25 =$

j) $\frac{1}{2}\sqrt{100} + \frac{1}{4}\sqrt{16} =$

e) $(\sqrt{9^2 - 56} + \sqrt{13^2 - 5^2}) \cdot 3 =$

k) $(\sqrt{4,41} + \sqrt{\frac{16}{100}}) : \sqrt{1 + \left(-\frac{3}{4}\right)^2} =$

Rešitve.

$$\begin{aligned} \text{a) } & \sqrt{144} + 3 \cdot \sqrt{361} = \\ & = 12 + 3 \cdot 19 = \\ & = 12 + 57 = \\ & = \underline{\underline{69}} \end{aligned}$$

$$\begin{aligned} \text{b) } & (\sqrt{49} + \sqrt{225}) \cdot 11 = \\ & = (7 + 15) \cdot 11 = \\ & = 22 \cdot 11 = \\ & = \underline{\underline{242}} \end{aligned}$$

$$\begin{aligned} \text{c) } & 3\sqrt{9} - \sqrt{16 \cdot 25} = \\ & = 3 \cdot 3 - \sqrt{400} = \\ & = 9 - 20 = \\ & = \underline{\underline{-11}} \end{aligned}$$

$$\begin{aligned} \text{č) } & 6^2 + 9\sqrt{4} - 3^3 = \\ & = 36 + 9 \cdot 2 - 27 = \\ & = 36 + 18 - 27 = \\ & = \underline{\underline{27}} \end{aligned}$$

$$\begin{aligned} \text{d) } & 2 \cdot 4^3 + \sqrt{3 \cdot 5^2 + 46} - 25 = \\ & = 2 \cdot 64 + \sqrt{3 \cdot 25 + 46} - 25 = \\ & = 128 + \sqrt{75 + 46} - 25 = \\ & = 128 + \sqrt{121} - 25 = \\ & = 128 + 11 - 25 = \underline{\underline{114}} \end{aligned}$$

$$\begin{aligned} \text{e) } & (\sqrt{9^2 - 56} + \sqrt{13^2 - 5^2}) \cdot 3 = \\ & = (\sqrt{81 - 56} + \sqrt{169 - 25}) \cdot 3 = \\ & = (\sqrt{25} + \sqrt{144}) \cdot 3 = \\ & = (5 + 12) \cdot 3 = \\ & = 17 \cdot 3 = \\ & = \underline{\underline{51}} \end{aligned}$$

$$\begin{aligned} \text{f) } & 5 \cdot 2^3 - 10^2 : (-25) = \\ & = 5 \cdot 8 - 100 : (-25) = \\ & = 40 + 4 = \\ & = \underline{\underline{44}} \end{aligned}$$

$$\begin{aligned} \text{g) } & -2\sqrt{81} + 2^3 \cdot 3^3 = \\ & = -2 \cdot 9 + 8 \cdot 27 = \\ & = -18 + 216 = \\ & = \underline{\underline{198}} \end{aligned}$$

$$\begin{aligned} \text{h) } & 8^2 - 5\sqrt{81} + (-2)^3 = \\ & = 64 - 5 \cdot 9 - 8 = \\ & = 64 - 45 - 8 = \\ & = \underline{\underline{11}} \end{aligned}$$

$$\begin{aligned} \text{i) } & 1000 \cdot 0,02^2 - \sqrt{0,16} = \\ & = 1000 \cdot 0,0004 - 0,4 = \\ & = 0,4 - 0,4 = \\ & = \underline{\underline{0}} \end{aligned}$$

$$\begin{aligned} \text{j) } & \frac{1}{2}\sqrt{100} + \frac{1}{4}\sqrt{16} = \\ & = \frac{1}{2} \cdot 10 + \frac{1}{4} \cdot 4 = \\ & = \frac{1 \cdot 10 \cdot 5}{2 \cdot 1} + \frac{1 \cdot 1 \cdot 1}{4 \cdot 1} = \\ & = 5 + 1 = \underline{\underline{6}} \end{aligned}$$

$$\begin{aligned} \text{k) } & (\sqrt{4,41} + \sqrt{\frac{16}{100}}) : \sqrt{1 + \left(-\frac{3}{4}\right)^2} = \\ & = (2,1 + \frac{4}{10}) : \sqrt{1 + \frac{9}{16}} = \\ & = (2,1 + 0,4) : \sqrt{\frac{16}{16} + \frac{9}{16}} = \\ & = 2,5 : \sqrt{\frac{25}{16}} = \\ & = 2,5 : \frac{5}{4} = \\ & = \frac{25}{10} \cdot \frac{4}{5} = \frac{25 \cdot 4 \cdot 2 \cdot 1}{10 \cdot 5 \cdot 1 \cdot 5 \cdot 1} = \\ & = \underline{\underline{2}} \end{aligned}$$