

Uvodni zadatak

Koji najveći broj možemo napisati
pomoću tri devetke?

999

99⁹

99

$$9^{99}$$

Koji najveći broj možemo napisati
pomoću tri četvorke?

444

44^4

4^{44}

4^{4^4}

Koji najveći broj možemo napisati
pomoću tri trojke?

333

33^3

3^{33}

3^{3^3}

Četiri četvorke

Razina 0

Koristeći četiri četvorke, znakove algebarskih operacija i zagrade, napiši brojeve od 1 do 10.

$$1 = \frac{44}{44}$$

$$1 = \frac{4 \times 4}{4 \times 4}$$

$$1 = \frac{4 + 4}{4 + 4}$$

$$2 = \frac{4}{4} + \frac{4}{4}$$

$$2 = 4 - \frac{4 + 4}{4}$$

$$3 = \frac{4 + 4 + 4}{4}$$

$$3 = \frac{4 \times 4 - 4}{4}$$

$$4 = (4 - 4) \times 4 + 4$$

$$5 = \frac{4 \times 4 + 4}{4}$$

$$6 = 4 + \frac{4 + 4}{4}$$

$$7 = 4 + 4 - \frac{4}{4} = \frac{44}{4} - 4$$

$$8 = 4 + 4 + 4 - 4$$

$$8 = \frac{4}{4} \times 4 + 4$$

$$9 = 4 + 4 + \frac{4}{4}$$

$$10 = \frac{44 - 4}{4}$$

$$1 = 44/44$$

$$2 = 4/4 + 4/4$$

$$3 = (4 + 4 + 4)/4$$

$$4 = (4 - 4) \times 4 + 4$$

$$5 = (4 \times 4 + 4)/4$$

$$6 = 4 + (4 + 4)/4$$

$$7 = 44/4 - 4$$

$$8 = 4 + 4 + 4 - 4$$

$$9 = 4 + 4 + 4/4$$

$$10 = (44 - 4)/4$$

Razina 1

Dozvoljena je uporaba simbola drugi korijen. Napiši brojeve od 11 do 20.

$$11 = \frac{44}{\sqrt{4} + \sqrt{4}}$$

$$12 = 4 + 4 + \sqrt{4} + \sqrt{4}$$

$$12 = \frac{44 + 4}{4}$$

$$13 = \frac{44}{4} + \sqrt{4}$$

$$14 = 4 + 4 + 4 + \sqrt{4}$$

$$15 = 4 \times 4 - \frac{4}{4}$$

$$16 = 4 + 4 + 4 + 4$$

$$17 = 4 \times 4 + \frac{4}{4}$$

$$18 = 4 \times 4 + 4 - \sqrt{4}$$

$$19 = ?$$

$$20 = 4 \times 4 + \sqrt{4} + \sqrt{4}$$

Razina 2

Dozvoljena je uporaba sljedećih simbola

$$n! = 1 \cdot 2 \cdot \dots \cdot n$$

\cdot (decimalna točka)

—
(periodički decimalni broj)

n^k (potencija)

$$4! = 24$$

$$(\sqrt{4})^{\sqrt{4}} = 4$$

$$.4 = \frac{2}{5}$$

$$.\overline{4} = \frac{4}{9}$$

$$19 = 4! - 4 - \frac{4}{4}$$

$$6 = 4 \times .4 + 4.4$$

$$8 = 4 + 4.4 - .4$$

$$11 = \frac{4}{.4} + \frac{4}{4}$$

$$13 = 4! - \frac{44}{4}$$

$$14 = 4 \times (4 - .4) - .4$$

$$16 = .4 \times (44 - 4)$$

$$18 = 44 \times .4 + .4$$

24 pomoću tri jednake znamenke

$$24 = 8 + 8 + 8$$

$$24 = 22 + 2$$

$$24 = 3^3 - 3$$

Možete li naći ostale kombinacije?

$$24 = 4! + 4 - 4$$

$$24 = \left(5 - \frac{5}{5}\right)!$$

$$24 = \left(\frac{6}{.6} - 6\right)!$$

$$24 = \left(\sqrt{9} + \frac{9}{9}\right)!$$

$$24 = (7 - \sqrt{\frac{7}{.7}})!$$

$$24 = (1 + \sqrt{\frac{1}{.1}})!$$

64 pomoću dvije četvorke

Napiši broj 64 koristeći se samo dvjema četvorkama.

$$64 = \sqrt{(\sqrt{\sqrt{4}})^{4!}}$$

64 pomoću jedne čtvorke

Napiši broj 64 koristeći samo jednu
čtvorku

[illegible]

$$21 = (4.4 + 4)/.4$$

$$22 = 44 \times \sqrt{4}/4$$

$$23 = (4 \times 4! - 4)/4$$

$$24 = 4 \times 4 + 4 + 4$$

$$25 = (4 \times 4! + 4)/4$$

$$26 = 4/.4 + 4 \times 4$$

$$27 = 4 - 4/4 + 4!$$

$$28 = 44 - 4 \times 4$$

$$29 = 4/.4/.4 + 4$$

$$30 = (4 + 4 + 4)/.4$$

$$31 = (4! + 4)/4 + 4!$$

$$32 = 4 \times 4 + 4 \times 4$$

$$33 = (4 - .4)/.4 + 4!$$

$$34 = 44 - 4/.4$$

$$35 = 44/4 + 4!$$

$$36 = 44 - 4 - 4$$

$$37 = (\sqrt{4} + 4!)/\sqrt{4} + 4!$$

$$38 = 44 - 4!/4$$

$$39 = (4 \times 4 - .4)/.4$$

$$40 = 44 - \sqrt{(4 \times 4)}$$

$$41 = (\sqrt{4} + 4!)/.4 - 4!$$

$$42 = \sqrt{4} + 44 - 4$$

$$43 = 44 - 4/4$$

$$44 = 44.4 - .4$$

$$45 = 4/4 + 44$$

$$46 = 44 - \sqrt{4} + 4$$

$$47 = 4! + 4! - 4/4$$

$$48 = 4 \times (4 + 4 + 4)$$

$$49 = (4! - 4.4)/.4$$

$$50 = 4!/4 + 44$$

$$51 = (4! - \sqrt{4})/.4 - 4$$

$$52 = 4 + 4 + 44$$

$$53 = \sqrt{4}/.4 + 4! + 4!$$

$$54 = 4/.4 + 44$$

$$55 = 44/ (.4 + .4)$$

$$56 = 4 \times (4/.4 + 4)$$

$$57 = (4! - .4)/.4 - \sqrt{4}$$

$$58 = (4^4 - 4!)/4$$

$$59 = 4!/.4 - 4/4$$

$$60 = 4 \times 4 + 44$$

$$61 = 4!/.4 + 4/4$$

$$62 = (.4 + .4 + 4!)/.4$$

$$63 = (4^4 - 4)/4$$

$$64 = 4! - 4 + 44$$

$$65 = (4^4 + 4)/4$$

$$66 = (4! + 4)/.4 - 4$$

$$67 = (\sqrt{4} + 4!)/.4 + \sqrt{4}$$

$$68 = 4 \times 4 \times 4 + 4$$

$$69 = (4 - .4 + 4!)/.4$$

$$70 = 4!/.4 + 4/.4$$

$$71 = (4! + 4.4)/.4 \qquad 76 = 4!/.4 + 4 \times 4$$

$$72 = 4! + 44 + 4 \qquad 77 = \sqrt{(4/.\bar{4})^4} - 4$$

$$73 = \sqrt{\sqrt{(\sqrt{4^4!})}} + 4/.\bar{4} \quad 78 = 4 \times (4! - 4) - \sqrt{4}$$

$$74 = (4! + 4)/.4 + 4 \qquad 79 = (4! - \sqrt{4})/.4 + 4!$$

$$75 = 4!/(.4 + .4)/.4 \qquad 80 = 4 \times (4 \times 4 + 4)$$

$$81 = (4/4 - 4)^4$$

$$86 = 44/.4 - 4!$$

$$82 = 4 \times (4! - 4) + \sqrt{4} \quad 87 = 4 \times 4! - 4/\bar{.4}$$

$$83 = (4! - .4)/.4 + 4! \quad 88 = 44 + 44$$

$$84 = 44 \times \sqrt{4} - 4 \quad 89 = (\sqrt{4} + 4!)/.4 + 4!$$

$$85 = (4/.4 + 4!)/.4 \quad 90 = 44 \times \sqrt{4} + \sqrt{4}$$

$$91 = 4 \times 4! - \sqrt{4/.4} \quad 96 = 4 \times (4.4 - .4)!$$

$$92 = 44 \times \sqrt{4} + 4 \quad 97 = 4 \times 4! + 4/4$$

$$93 = 4 \times 4! - \sqrt{(4/.\overline{4})} \quad 98 = 4 \times (4! + .4) + .4$$

$$94 = 4 \times (4! - .4) - .4 \quad 99 = 44/\sqrt{(. \overline{4} \times . \overline{4})}$$

$$95 = 4 \times 4! - 4/4 \quad 100 = 44/.44$$