

Ratkaisut neliäjuurilaskuihin

Laske

$$3^2 = 9$$

$$(-3)^2 = 9$$

$$\sqrt{9} = 3$$

$$\sqrt{0} = 0$$

$$0,2^2 = 0,04$$

$$(-40)^2 = 1600$$

$$\sqrt{64} = 8$$

$$\sqrt{0,25} = 0,5$$

$$10^2 = 100$$

$$100^2 = 10000$$

$$\sqrt{1} = 1$$

$$\sqrt{-100} = \text{ei voi l.}$$

$$11^2 = 121$$

$$0,7^2 = 0,49$$

$$\sqrt{144} = 12$$

$$\sqrt{40000} = 200$$

Sievennä tai laske

$$x \cdot x = x^2$$

$$m : \sqrt{m} = \sqrt{m}$$

$$2(\sqrt{5})^2 = 2 \cdot 5 = 10$$

$$x^2 : x = x$$

$$\sqrt{100} - \sqrt{36} = 10 - 6 = 4$$

$$\sqrt{100} \cdot \sqrt{4} = 10 \cdot 2 = 20$$

$$\sqrt{m} \cdot \sqrt{m} = m$$

$$\sqrt{80 - 16} = \sqrt{64} = 8$$

$$\sqrt{64} : 2 = 8 : 2 = 4$$

Laske

$$\sqrt{\frac{9}{100}} = \frac{3}{10}$$

$$\sqrt{\frac{64}{16}} = \sqrt{4} = 2$$

$$\sqrt{5\frac{1}{4}} = \sqrt{\frac{25}{4}} = \frac{5}{2} = 2\frac{1}{2}$$

$$\sqrt{\frac{-4}{-36}} = \sqrt{\frac{4}{36}} = \frac{2}{6} = \frac{1}{3}$$

Laske välivaihein

$$\sqrt{36} - \sqrt{25} + \sqrt{16} - \sqrt{9} + \sqrt{4} - \sqrt{1} + \sqrt{0}$$

$$= 6 - 5 + 4 - 3 + 2 - 1 + 0$$

$$= 12 - 9$$

$$= 3$$

$$10(\sqrt{9} + 3^3) : 10$$

$$= 10(3 + 27) : 10$$

$$= 10 \cdot 30 : 10$$

$$= 300 : 10$$

$$= 30$$

Laske välivaihein

$$\left(\frac{\sqrt{\sqrt{49} + 3\sqrt{36}}}{\sqrt{100 : 4}} \right)^2$$

$$= \left(\frac{\sqrt{7 + 3 \cdot 6}}{\sqrt{25}} \right)^2$$

$$= \left(\frac{\sqrt{7 + 18}}{5} \right)^2$$

$$= \left(\frac{\sqrt{25}}{5} \right)^2 = \left(\frac{5}{5} \right)^2 = 1^2 = 1$$

$$\frac{1}{4} \cdot \frac{\sqrt{20 + 29}}{5^5 : 5^3}$$

$$= \frac{1}{4} \cdot \frac{\sqrt{49}}{5^2}$$

$$= \frac{1}{4} \cdot \frac{7}{25}$$

$$= \frac{7}{100}$$