

Druhá mocnina

$$m^2 = m \cdot m$$

obsah obdélníku: $S = a \cdot b$

$$m \cdot m = [m^2]$$

mocnitel
(exponent)

$$\boxed{a^2} = a \cdot a$$

základ
mocniny

druhá mocnina [a na druhou]

obsah čtverce:

$$S = a \cdot a$$

$$S = a^2$$

$$a^2 = a \cdot a$$

$$3^2 = 3 \cdot 3$$

$1^2 = 1$	$6^2 = 36$	$11^2 = 121$	$16^2 = 256$
$2^2 = 4$	$7^2 = 49$	$12^2 = 144$	$17^2 = 289$
$3^2 = 9$	$8^2 = 64$	$13^2 = 169$	$18^2 = 324$
$4^2 = 16$	$9^2 = 81$	$14^2 = 196$	$19^2 = 361$
$5^2 = 25$	$10^2 = 100$	$15^2 = 225$	$20^2 = 400$

Druhá odmocnina

$$a^2 = a \cdot a$$

$$16 = 4^2 = 4 \cdot 4$$

$$\sqrt{a^2} = a$$

$$\sqrt{16} = 4 \text{ příklad odmocniny}$$

pr.

$$11^2 = 121$$

$$\sqrt{121} = 11$$

$$7^2 = 49$$

$$\sqrt{49} = 7$$

$$\sqrt{100} = 10$$

$(10^2 = 100)$

$$\sqrt{225} = 15$$

$(15^2 = 225)$

$$3 + \sqrt{16} - 3$$

odmocnitko

$$8^2 = 64$$

$$80^2 = \underbrace{6400}_{8^2}$$

$$800^2 = 640\,000$$

$$0,9^2 = \underbrace{0,81}_{9^2}$$

$$0,09^2 = 0,0081$$

$$0,009^2 = 0,000081$$

$$11^2 = 121$$

$$1,1^2 = 1,21$$

$$0,11^2 = 0,0121$$

$$15^2 = \underline{\underline{225}}$$

$$0,15^2 = 0,0225$$

$$50^2 = 2500$$

$$0,3^2 = 0,09$$

$$120^2 = 14400$$

$$700^2 = 490\,000$$

$$0,14^2 = 0,0196$$

$$1,3^2 = 1,69$$

$$6000^2 = 36\,000\,000$$

$$-0,8^2 = -0,64$$

$$(-0,8)^2 = 0,64$$

$$-20^2 = -400$$

$$(-20)^2 = 400$$

$$(-20) \cdot (-20) = +$$

$$-(20^2) = \underline{\underline{-400}}$$



Druhá mocnina kterého-koli čísla je vždy číslo **KLADNÉ !!!**

$$12^2 = 144$$

$$0,5^2 = 0,25$$

$$110^2 = 12\ 100$$

$$1,3^2 = 1,69$$

$$800^2 = 640\ 000$$

$$70^2 = \underline{\underline{4900}}$$

$$0,07^2 = \underline{\underline{0,0049}}$$

$$0,15^2 = 0,0225$$

$$2000^2 = 4\ 000\ 000$$

$$0,14^2 = 0,0196$$

$$15^2 = 225$$

$$90^2 = 8100$$

$$\sqrt{114} \doteq 10,5 \text{ (ODHAD)} \quad (\doteq 10,7)$$

$$\begin{array}{cc} \sqrt{100} = 10 & \sqrt{121} = 11 \\ \text{14} & \text{7} \end{array}$$

$$\sqrt{2600} \doteq \underline{\quad 50 \quad} \text{ (ODHAD)} \quad (\doteq 51)$$

$$\sqrt{25} = 5$$

$$\sqrt{1290} \doteq \sqrt{1300} \doteq 35 \quad (3,5 \rightarrow 0)$$

$$\sqrt{9} = 3 \quad \sqrt{16} = 4$$

$$360^2 = 400^2 = 160000 (<)$$

$$\sqrt{121000} = \sqrt{120000} = 350 (35 \rightarrow 00)$$

$\sqrt{9} = 3 \quad \sqrt{16} = 4$

$$1^2 \quad \dots \quad 15^2$$

kalkulacička — mocnina i odmocnina

22^2

$22 \times 22 =$

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A yellow rectangular area representing a calculator keypad. It contains the number '22', a square button with 'x²', and a square button with '='. There are small vertical lines on the left and right sides of the yellow area, suggesting a screen or a physical keypad. $22 \times^2 =$

$\sqrt{\quad}$

$\text{pi. } \sqrt{100} =$

$\sqrt{100} =$

MOCNINA a ODMOCNINA
ZPAMETI

$$10^2 = 100$$

$$100^2 = 10000$$

$$1000^2 = 1000000$$

⋮

$$1000000^2 = 1000000000000$$

pr. $400^2 = 490000$

$$(7 \cdot 100)$$

$$140^2 = 19600$$

$$2000^2 = 4000000$$

$$0,1^2 = (0,1 \cdot 0,1) = 0,01$$

$$0,01^2 = 0,0001$$

$$0,001^2 = 0,000001$$

atd.

pr. $1,3^2 = \underline{\underline{1,69}}$
($13^2 \dots$)

$$0,09^2 = \underline{\underline{0,0081}}$$

a^2, \sqrt{b} - kalkulačka

x^2



$$1,9^2 = 3,61$$

$$564^2 = 318\,096$$

$$0,802^2 = 0,643204$$

opsat vše

$$\sqrt{264} = 16,25$$

$$\sqrt{5,2} = 2,28$$

$$\sqrt{79,2} = 8,9$$

zaokrouhlit na dvě desetinná místa