

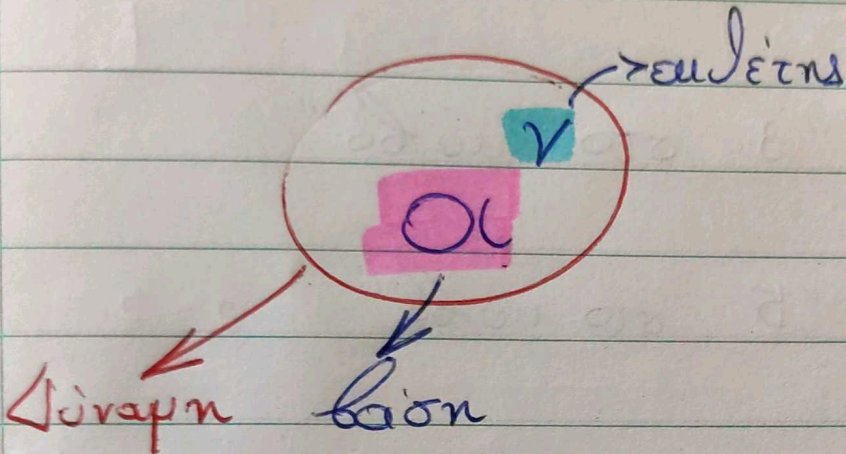
Δυνάμεις

$$3^2 = 3 \cdot 3 = 9$$

$$10^2 = 10 \cdot 10 = 100$$

$$10^3 = 10 \cdot 10 \cdot 10 = 100 \cdot 10 = 1000$$

$$10^4 = 10 \cdot 10 \cdot 10 \cdot 10 = 10000$$



$$\bullet 3^1 = 3$$

$$4^1 = 4$$

$$1000^1 = 1000$$

$$a^1 = a$$

$$\bullet 3^0 = 1$$

$$4^0 = 1$$

$$1000^0 = 1$$

$$3^3 = 3 \cdot 3 \cdot 3 = 27 \div 3$$

$$3^2 = 3 \cdot 3 = 9 \div 3$$

$$3^1 = 3 \div 3$$

$$3^0 = 1 \div 3$$

$$a^0 = 1$$

$$\bullet 1^3 = 1 \quad 1^5 = 1$$

$$1^a = 1$$

$$3^2 = 9$$

"3 στο τετράγωνο"

$$5^2 = 25$$

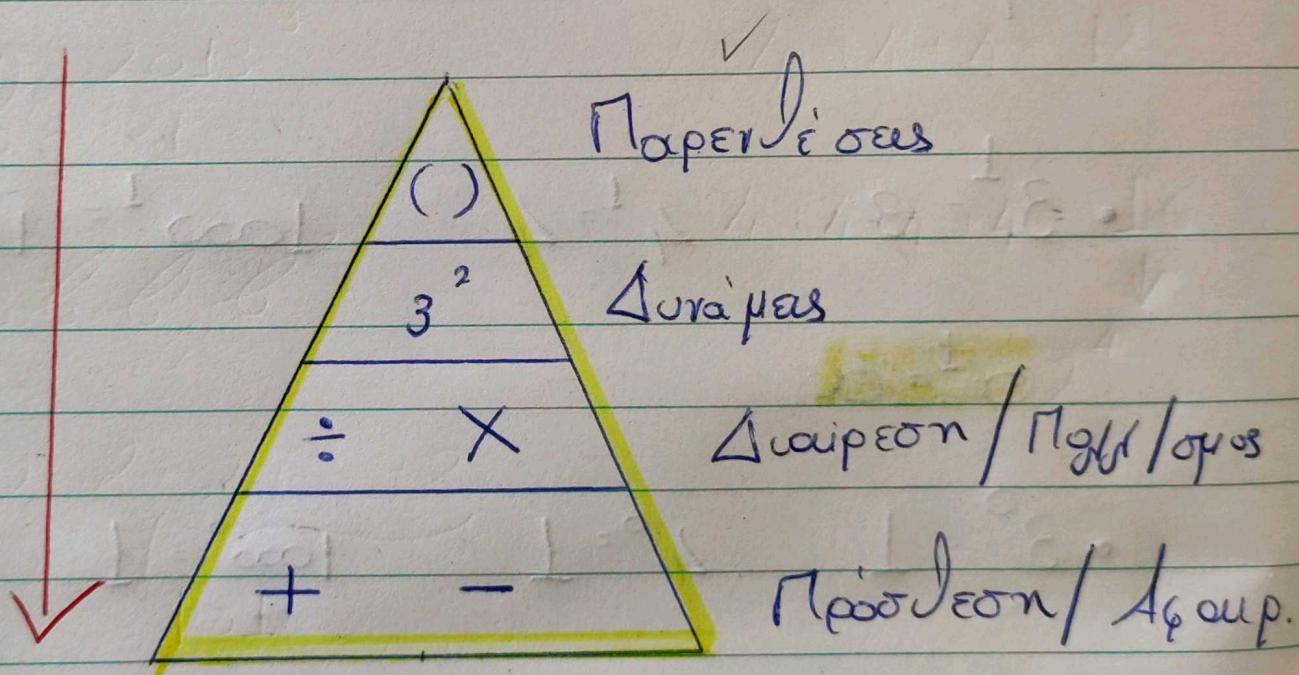
"5 στο τετράγωνο"

$$3^3 = 27$$

"3 στο κύβο"

$$5^3 = 125$$

"5 στο κύβο"



Παράδειγμα:

$$(5-2)^3 \div 9 - 1 =$$

$$= (3)^3 \div 9 - 1 =$$

$$= 27 \div 9 - 1 =$$

$$3 - 1 = 2$$

$$3^4 - 2^3 + 6 =$$

$$81 - 8 + 6 =$$

$$73 + 6 = 79$$

$$3^4 = 3 \cdot 3 \cdot 3 \cdot 3 = 71$$

$$27 \cdot 3 =$$

$$2^3 = 2 \cdot 2 \cdot 2 = 8$$

$$711$$

$$81$$

$$8$$

$$73$$

Παραστάσεις: $3^3 =$ $3 - 9 =$

$$6 \div 5 =$$

Εξίσωση: $x + 1 = 5$ $9 - 8 = 1$

α) $3^4 = 81$

β) $4 \cdot 3 \cdot 5 = \times$

γ) 2013^3

δ) $4 + 4 + 4 = 12$

ε) $6 \cdot 6 = 6^2$

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

↓
 2^4

στ) $\underbrace{2 + 2 + \dots + 2}_{101} =$

$$101$$

$$101 \cdot 2 = 202$$

• Δυνάμεις του 2:

$$2^0 = 1$$

$$2^1 = 2$$

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

$$2^3 = 2 \cdot 2 \cdot 2 = 8$$

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

$$2^5 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 32$$

$$2^6 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 64$$

$$2^7 = 128$$

$$2^8 = 256$$

• Δυναμεις του 3:

$$3^0 = 1$$

$$3^1 = 3$$

$$3^2 = 9$$

$$3^3 = 27$$

$$3^4 = 81$$

$$3^5 = 243$$

σε/50 2)

$$α) 7^2 =$$

$$12^2 = 12 \cdot 12 = 144$$

$$2^3 = 2 \cdot 2 \cdot 2 = 8$$

$$10^4 = 10 \cdot 10 \cdot 10 \cdot 10 = 10\ 000$$

$$3^5 = 3 \cdot 3 \cdot 3 \cdot 3 \cdot 3 = 243$$

$$1^3 = 1$$

$$1234^1 = 1234$$

$$5^0 = 1$$

$$20 \cdot 2^0 = 20$$

ex 50

4)

$$1 = 1^2$$

$$64 = 2^6 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$$

$$1 = 1^4$$

$$64 = 8 \cdot 8 = 8^2$$

$$1 = 1^6$$

$$64 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$$

$$= 4^3 \quad 4 \cdot 4 \cdot 4$$

$$81 = 3^4 = \underset{9}{3 \cdot 3} \cdot \underset{9}{3 \cdot 3} =$$

$$81 = 9^2 = 9 \cdot 9 = 81$$

$$81 = 81' = 81$$

$$256 = 2^8 = \underset{16}{2 \cdot 2 \cdot 2 \cdot 2} \cdot \underset{16}{2 \cdot 2 \cdot 2 \cdot 2}$$

$$256 = 16^2 = 16 \cdot 16$$

$$256 = 256'$$

$$256 = \underset{4}{2 \cdot 2} \cdot \underset{4}{2 \cdot 2} \cdot \underset{4}{2 \cdot 2} \cdot \underset{4}{2 \cdot 2}$$

$$= 4^4$$

$$\begin{aligned}
 & (6 - 3 \div 3 + 9)^2 - 5 \times 6 = \\
 & \underbrace{(6 - 1 + 9)}_{= 14^2}^2 - 5 \times 6 = \\
 & \quad \quad \quad \underbrace{\quad}_{= 196} - 30 = 166
 \end{aligned}$$

$$\begin{array}{r}
 196 \\
 - 30 \\
 \hline
 166
 \end{array}$$