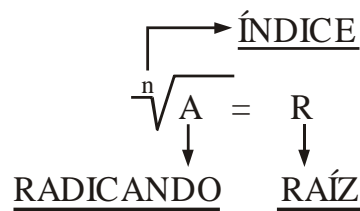
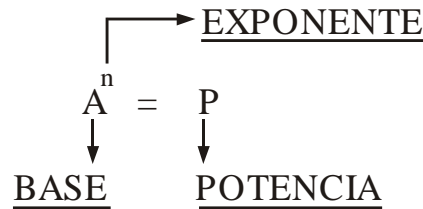


POTENCIACION Y RADICACION



- | | | |
|-----------------------|-------------------------------|-------------------------------|
| 1. $3^5 = \square$ | 15. $\sqrt{64} = \square$ | 28. $\sqrt{36} = \square$ |
| 2. $5^3 = \square$ | 16. $\sqrt{9} = \square$ | 29. $\sqrt{121} = \square$ |
| 3. $7^2 = \square$ | 17. $\sqrt{225} = \square$ | 30. $\sqrt{289} = \square$ |
| 4. $8^3 = \square$ | 18. $\sqrt{400} = \square$ | 31. $\sqrt{4} = \square$ |
| 5. $14^2 = \square$ | 19. $\sqrt{441} = \square$ | 32. $\sqrt{100} = \square$ |
| 6. $10^7 = \square$ | 20. $\sqrt[8]{1} = \square$ | 33. $\sqrt{196} = \square$ |
| 7. $126^0 = \square$ | 21. $\sqrt[3]{512} = \square$ | 34. $\sqrt[4]{81} = \square$ |
| 8. $264^1 = \square$ | 22. $\sqrt{144} = \square$ | 35. $\sqrt{324} = \square$ |
| 9. $11^3 = \square$ | 23. $\sqrt{256} = \square$ | 36. $\sqrt[4]{625} = \square$ |
| 10. $2^8 = \square$ | 24. $\sqrt{16} = \square$ | 37. $\sqrt{81} = \square$ |
| 11. $6^4 = \square$ | 25. $\sqrt[3]{729} = \square$ | 38. $\sqrt{25} = \square$ |
| 12. $491^0 = \square$ | 26. $\sqrt{49} = \square$ | 39. $\sqrt{169} = \square$ |
| 13. $12^3 = \square$ | 27. $\sqrt[6]{64} = \square$ | 40. $\sqrt{361} = \square$ |
| 14. $15^3 = \square$ | | |

CALCULEMOS MENTALMENTE

Ejem. 1

$$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{191 + \sqrt{21 + \sqrt{14 + \sqrt{7 - \sqrt{3 + \sqrt{36}}}}}}}}}}$$

¡Resuélvelo mentalmente siguiendo este orden!

$$\sqrt{36} = 6$$

$$6 + 3 = \sqrt{9} = 3$$

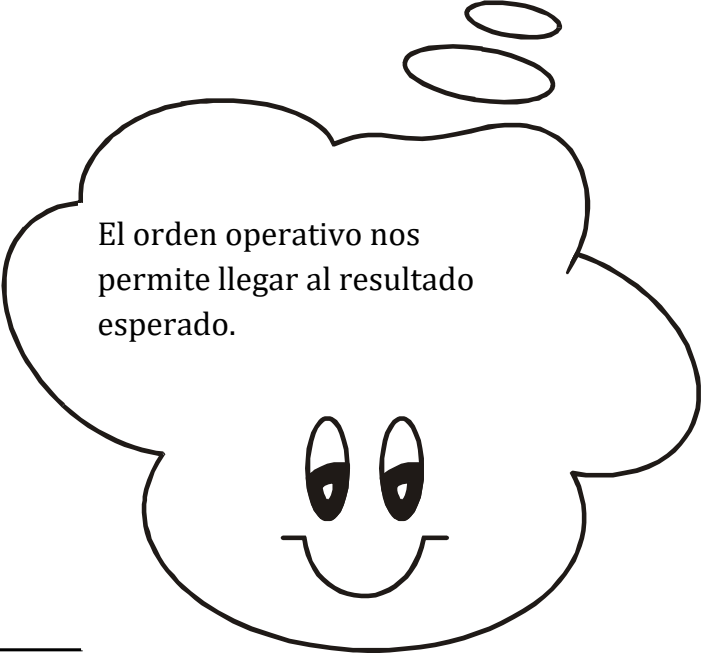
$$7 - 3 = 4$$

$$\sqrt{4} = 2 + 14$$

$$\sqrt{16} = 4 + 21$$

$$\sqrt{25} = 5 + 191$$

$$\sqrt{196} = 14$$



El orden operativo nos permite llegar al resultado esperado.

Ejem. 2

$$\sqrt[3]{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{20 + \sqrt{43 + \sqrt{26 + \sqrt{99 + \sqrt[3]{16 - \sqrt{225}}}}}}}}}}}}$$

$$\sqrt{225} = 15$$

$$16 - 15 = 1$$

$$\sqrt[3]{1} = 1 + 99$$

$$\sqrt{100} = 10 + 26$$

$$\sqrt{36} = 6 + 43$$

$$\sqrt{49} = 7 + 20$$

$$\sqrt[3]{27} = 3$$

CIRCULO EDUCATIVO



Resuelve los siguientes ejercicios mentalmente y coloca la respuesta en el cuadro:

1. $\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{142 + \sqrt[6]{44\sqrt{383 + \sqrt{285 + \sqrt{\sqrt{100 + \sqrt{36}}}}}}}}}}}}}}}} = \boxed{}$

2. $\sqrt[4]{75 + \sqrt{18 + \sqrt{319 + \sqrt{23 + \sqrt{17 - \sqrt{169}}}}} = \boxed{}$

3. $\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{65 + \sqrt{252 + \sqrt[3]{53 + \sqrt{116 + \sqrt[4]{618 + \sqrt{28 + \sqrt{441}}}}}}}}}}}}}} = \boxed{}$

4. $\sqrt{17 + \sqrt{366 - \sqrt{9 + \sqrt{259 - \sqrt{13 - \sqrt{11 + \sqrt[3]{\sqrt{125}}}}}}} = \boxed{}$

5. $\sqrt[4]{9998 + \sqrt[3]{1\sqrt{47 + \sqrt[4]{4 + \sqrt{136 + \sqrt[3]{521 - \sqrt[3]{729}}}}}}} = \boxed{}$

CRUCINÚMERO

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | | | B | C | | D | E |
| | | F | | | G | | |
| | H | | | | | I | |
| J | | | | | K | | L |
| M | | | N | O | | P | |
| | | Q | | | | | |

HORIZONTAL

VERTICAL

a) $(\sqrt{625} + 42) - (\sqrt{81} + \sqrt{25}) + 7$

b) $\{(\sqrt{9} + \sqrt{25})^2 \times 10 - (\sqrt{25} + \sqrt{4})^2 \times \sqrt{144} - 40\}$

d) $(\sqrt{81} + \sqrt{9})^2 - (\sqrt{81} - \sqrt{36})^3 - 62 \div \sqrt{4}$

h) $\sqrt{400000000} + \sqrt{100000000000} \times \sqrt{9} + \sqrt{64000000}$

j) $(\sqrt{81} + \sqrt{36} - \sqrt{25})^2$

k) $\sqrt{25} \times \sqrt{10000} + 31$

m) $\sqrt{225} \times \sqrt{9} + 3$

n) $\sqrt{121} \times \sqrt{4} =$

p) $(\sqrt{\sqrt{144} + \sqrt{169}})^2 \times \sqrt{4} + \sqrt{9}$

q) $\sqrt{9000000} + \sqrt{250000} + \sqrt{6400}$

a) $(\sqrt{81})^2 - \sqrt{100} - \sqrt{121}$

b) $(\sqrt{64} + \sqrt{9})^2 + (\sqrt{121} - 9)^2 - 17$

c) $\sqrt{625} \times \sqrt{100}$

e) $\{(\sqrt{81} - \sqrt{49}) \times (\sqrt{36} - \sqrt{16})^3\} - \sqrt{49} + 51$

f) $(\sqrt{900} + \sqrt{4}) \times (\sqrt{400} + \sqrt{4})$

g) $\sqrt{250000} + \sqrt{100} + \sqrt{25}$

h) $\sqrt{360000} + \sqrt{100} + \sqrt{4}$

i) $\sqrt{40000} + \sqrt{900} + \sqrt{25}$

j) $(2^3 \times \sqrt{25} + 10) \times \sqrt{4} + 10$

l) $\sqrt{10000} + \sqrt{900} + \sqrt{4}$

n) $(\sqrt{64} \times 2) + \sqrt{81}$

o) $(\sqrt{144} + \sqrt{4})\sqrt{4}$