

## POTENCIAS Y RADICALES

1) Resolver:

a)  $10 - \{8 + 4 - [5 - 3 + 2 - (-9 + 7 - 4)] + 4 + 2 - 5 - (1 - 2) - 21\} - 1 =$

b)  $5 + \{-2 + [-2 + (3 - 1) + 2] + 8\} - \{-3 + [-1 + (-9)]\} =$

c)  $3 - \{3 - [3 - (3)]\} + 2 - \{2 - [2 - (2)]\} =$

d)  $1 - \{2 - [3 - (4 + 5)]\} - 6 + \{-7 + [-8 + (-9)]\} =$

e)  $\sqrt[3]{-1} + \sqrt{4} - \sqrt[5]{-32} =$

f)  $\sqrt[3]{-1 + \frac{7}{8}} - \sqrt{-\frac{3}{4}} + 1 =$

g)  $\sqrt{1 - \left(\frac{3}{5}\right)^2} - \sqrt{1 - \left(\frac{4}{5}\right)^2} =$

h)  $4 \cdot \left(\frac{3}{2}\right)^2 + \left(\frac{3}{2}\right)^{-1} : \left(\frac{3}{2}\right)^{-2} =$

i)  $\sqrt{1 - \frac{8}{9}} \cdot (-3)^2 + \left(-\frac{1}{2}\right)^3 : \frac{3}{2} =$

j)  $\sqrt{\frac{1}{16}} \cdot \sqrt{-27} : \frac{3}{4} - \left(-\frac{2}{3}\right)^{-3} =$

k)  $(\sqrt{3} + 4)^2 - (1 + 4\sqrt{3})2 =$

l)  $\sqrt{\sqrt{10} + 6} \cdot \sqrt{\sqrt{10} - 6} =$

m)  $(3 - \sqrt{2})^2 - 6(3 - \sqrt{2}) + 7 =$

n)  $(\sqrt{7} - 3)^2 + 6(\sqrt{7} - 3) - 19 =$

o)  $3\sqrt{8} - 2\sqrt{18} + 4\sqrt{50} =$

p)  $4\sqrt[3]{5} - 2\sqrt[3]{135} + 3\sqrt[3]{1600} - 15\sqrt{\frac{1}{25}} =$

q)  $(8\sqrt{2} + 5\sqrt{3})(4\sqrt{2} - 3\sqrt{3}) =$

r)  $(5 + 2\sqrt{3})^2 - 10(5 + 2\sqrt{3}) + 13 =$

s)  $\frac{2}{\sqrt{18}} - (\sqrt{2} - 1)^2 =$

t)  $\frac{2 + \sqrt[3]{4}}{3\sqrt[3]{4}} =$

u)  $\frac{\sqrt{\sqrt{2} + 1}}{\sqrt{\sqrt{2} - 1}} =$

v)  $\frac{1}{\sqrt{7} + \sqrt{3}} =$

w)  $\frac{7 - \sqrt{5}}{3 + \sqrt{5}} =$

x)  $\frac{\sqrt{6}}{2 - \sqrt{6}} =$

y)  $\frac{2}{\sqrt{2} + \sqrt{3} + \sqrt{5}} =$

z)  $\frac{12}{3 + \sqrt{5} - 2\sqrt{2}} =$