ÁLGEBRA

Quinto Grado de Primaria

Teoría de Exponentes y Radicales

PRACTIQUEMOS

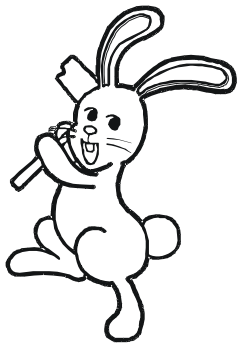
1. Reducir:

$$M = \left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-3} - \left(\frac{1}{4}\right)^{-2} + \left(\frac{1}{10}\right)^{0} + 12^{1}$$

2. Aplica las propiedades y efectúa:

a) $a^4 \ a \ a^3 =$

b) $3m^5 \ m^3 =$



c) $\left[\left(\frac{3a}{5}\right)^3\right]^2 =$

d) $\left(\frac{2}{5}\right)^3 \left(\frac{5}{7}\right)^3 \left(\frac{7}{12}\right)^3 =$

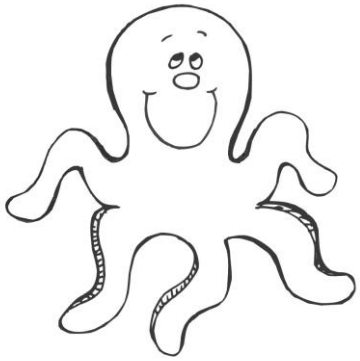


e) $x^6 \div x^3 =$



f) $a^4b^5 \div a^2b^3 =$

g) $\left[\left(\sqrt{5}\right)^7\right]^0 =$



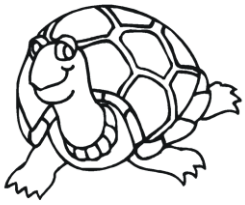
h) $2^4 \times 2^5 \div 2^8$

i) $\left[(3)^3\right]^2 \div (3)^2 \times \left[(3)^0\right]^8 =$



j) $4^{3/10} \times 4^{2/10} =$

k) $x^a \times x^b \div x^{a+b} =$



l) $\left(\sqrt[4]{x^3y^2}\right)^8 \times \left(\sqrt{xy}\right)^2 =$

m) $4m^5n^6x \cdot 3mn^7xy \div 6m^3n^{10}$

n) $\left(\sqrt[4]{x^3y^2}\right)^8 \times \left(\sqrt{xy}\right)^2$



o) $a^5b^3c^3 \div a^2b^2c$

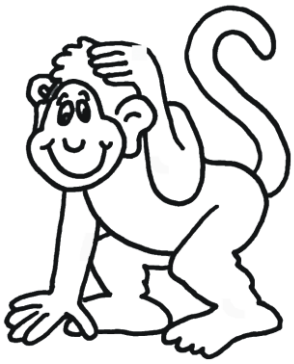
p) $\dfrac{\sqrt{\left(\frac{1}{20}\right)^{-1} + \left(\frac{1}{17}\right)^{-1} - \left(\frac{1}{125}\right)^{0}}}{18} =$

3. Efectúa :



a) $14^0 + 8^1 + 1^{56} =$

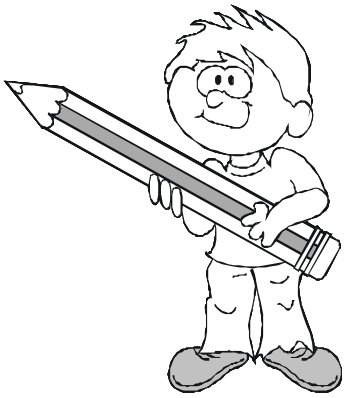
b) $\dfrac{6^5 \times 6^7}{6^{10}} =$



c) $9^{1/2} =$

d) $8^{\frac{1}{3}} =$

e) $16^{3/4} =$



f) $\left(\dfrac{32}{243}\right)^{-\frac{1}{5}} =$

g) $\sqrt[5]{\sqrt[4]{\sqrt[3]{6}}} =$

h) $\dfrac{5^{32} \times 5^{60}}{5^{80} \times 5^{10}} =$



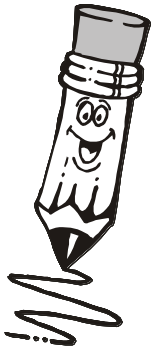
i) $\dfrac{2^4 \times 5^2 \times 2^6 \times 5^5}{2^8 \times 5^3 \times 5^2} =$

j) $\dfrac{13^2 \times 10^5 \times 13^3}{10^2 \times 10^3 \times 13^4} =$



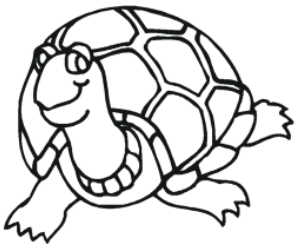
1. Reducir : $\left(\frac{1}{2}\right)^{-5} + \left(\frac{1}{3}\right)^{-2} - \left(\frac{1}{4}\right)^{-1/2} - \left(\frac{4}{5}\right)^{0} + (70)^{1}$

2. Aplica las propiedades y efectúa :



a) $m^4 \times m^3 \times m^5 =$

b) $4m^3 \times m^2 =$



c) $\left[\left(\frac{x^2}{y}\right)^3\right]^2 =$

d) $\left(\frac{3}{2}\right)^2 \times \left(\frac{5}{3}\right)^4 \times \left(\frac{2}{5}\right)^3 =$

e) $49x^5 \div 7x^3 =$

f) $\left[7^{2^3}\right]^0 =$

g) $m^x \cdot m^y \div m^{x+y} =$

h) $\left(\sqrt[5]{ab^2}\right)^{30} \times \left(\sqrt[3]{ab^2}\right)^{15} =$